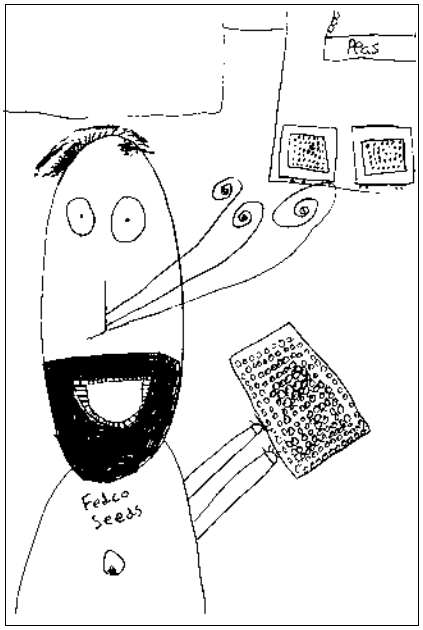
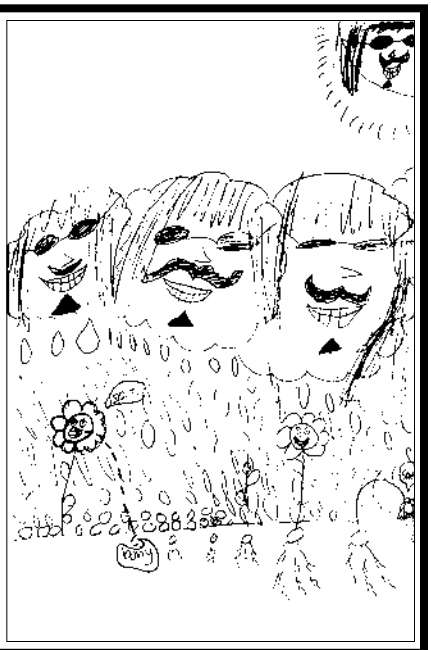
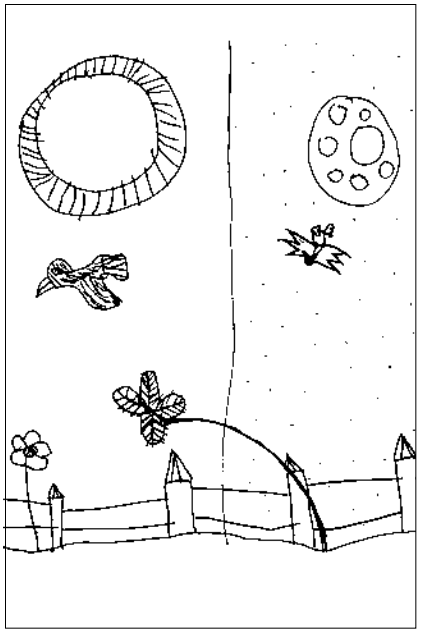
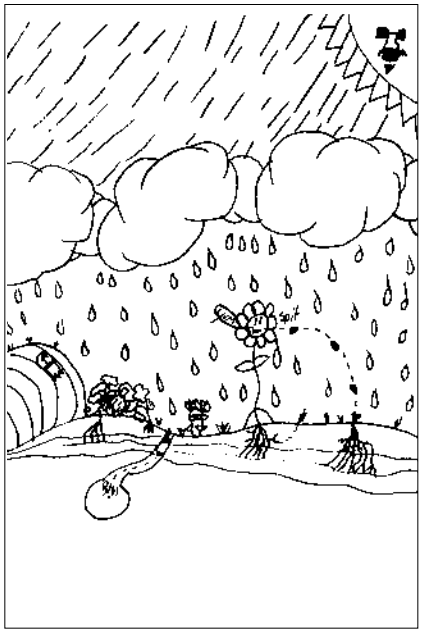
FEDCO

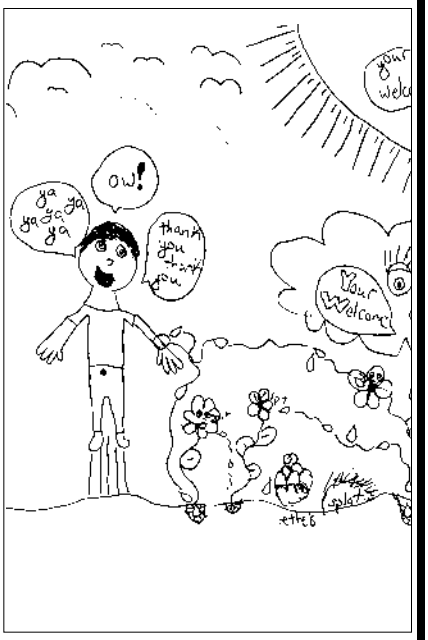
2014

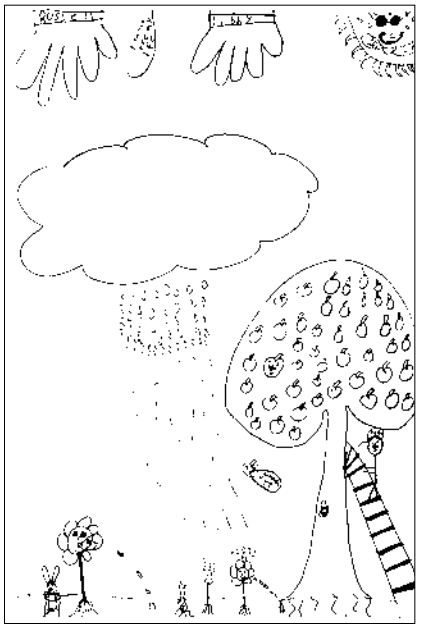










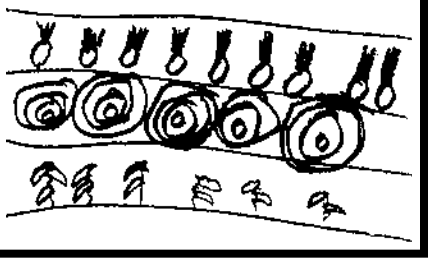


When the Garden Started

For me, I think it started with the free seeds
End of school
Fourth grade
And a few weeks later
  Radishes
    Then lettuce
      Then peas.

        Or maybe it was the smell
          of the sweet peas Gramp planted
            outside Gram's bedroom window
              when I was six.

Or something good to eat.



Ordering information

Fedco Division	Goods offered	Descriptions begin	Order form	Discount deadline	Ordering deadline	Shipments
Seeds	vegetables, flowers, herbs	page 11	page 75	none	mail: March 21 online: September 30	January 7–April January 7–Oct.
Moose Tubers	seed potatoes, onion sets	page 110	page 77	February 28	March 21	early April–early May
Organic Growers Supply	soil amendments, cover crops, tools, supplies & books	page 118	page 79	none	none	year-round

Our FEDCO TREES catalog, available in October, lists fruit trees, berry bushes, ornamentals, perennials and tender bulbs.
Our FEDCO BULBS catalog, available in June, lists fall-planted flowerbulbs and garlic.

Full Index on Back Cover

A Fedco Primer for New Friends and Old

Fedco has five orders: Seeds, Moose Tubers, Organic Growers Supply, Trees, and Bulbs, and sends out three catalogs annually. We work out of three warehouses in Clinton, Maine. Our business office is in Clinton but our postal address is still Waterville. We do not have a retail store. We deal exclusively by mail and internet orders except during designated pickup and public sale days, our booth at the Common Ground Country Fair, and periodic visits to other special events.

In our part of the world frosts can occur nine months of the year and the ground can be frozen for about five months from late November until mid-April.

- **Trees** are alive, highly perishable, must be kept cool and wet and cannot freeze. We ship trees and perennial plants only in the spring.
- **Fall bulbs** and garlic are alive, perishable, need to be kept cool but cannot freeze. We ship only in fall just before planting time.
- **Seed potatoes** and onion sets are alive, perishable, must be kept cool but cannot freeze. We ship only in April and early May.
- **Seeds** are alive, dormant, must be kept cool and dry, may freeze if kept dry. We ship peak-season orders in January–early spring. From April–early October we ship internet orders only.
- **Books and supplies** are not alive. We ship year-round. We ship **cover crops**, which are alive, year-round when available.

How to Order

Mail your order to Fedco Seeds, PO Box 520, Waterville, ME 04903.

Please *do not* use certified or express mail—they *delay* our receipt of your order.

Order online at fedcoseeds.com.

All orders must include check, money order, or Visa, MasterCard, Discover or American Express information. Orders under $25 please pay with a check or money order. Please do not send cash. Sorry, we do not accept food stamps.

Each division has its own order form.

- Please use the proper order form for each division.
- Please do not mix orders from separate divisions on one form.
- You may send in separate forms from more than one division at the same time and pay with one check. Figure totals for each division on the proper form, then add division totals to figure your grand total.
- Use a 2014 catalog. Don't have one? Please request a current edition.

All of our seed is untreated.

- *Can I order by phone?* No. To keep our product costs low and our order fulfillment accurate, Fedco does not take orders by fax or phone.
- *Can I order all products on one order form?* No, Fedco has different divisions that operate out of different warehouses on different seasonal schedules. Help us keep our costs down and our prices low by sending orders on each division's own order form.
- *Can I combine totals from different orders to get a discount or a higher discount?* No, each division has a different discount schedule that applies only to its own order form.
- *Can I get an express shipment?* No. We fill each order in the same order that we receive it and do not expedite orders. We think it's unfair to allow folks to pay extra to buy their way to the head of the line.

Fedco Facilitation
phone: (207) 426-9900
Request a catalog: (207) 426-0090
email: questions@fedcoseeds.com

Regular phone hours: Jan.–May 15, Mon–Fri, 9am–4pm.
We are available Wednesdays and at irregular hours the rest of the year.
Contact us to:

- Request more catalogs or order forms. These may also be downloaded from our website.
- Get answers to ordering questions.
- Receive freight quotes and prices for bulk quantities for Moose Tubers & Organic Growers Supply.
- Resolve problems.

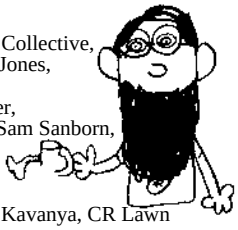
Often we are most efficiently able to provide service by email. We will reply to your emails as soon as we can. Please do not email and call about the same issue without first allowing us a few days to respond.

We are committed to offering reasonably priced quality products and to providing fair wages for our worker cooperative members. We ask your cooperation in helping us keep our labor costs and our prices down by avoiding the following calls or emails, which add costs without offering you benefits:

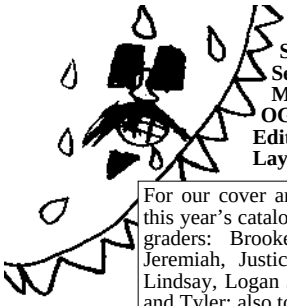
- Frozen spuds: We cannot ship potatoes until April because we do not have a potato storage facility. Seed stock arrives at the end of March.
- Nervous Neds & Nellies: For seeds and supplies please allow at least 2–3 weeks after sending order before calling. For spuds, see above.
- Order corrections: For one or a few mistakes please mail back the correction form on the back of your invoice instead of calling.
- Deadline dilemmas: At, around, or just past deadlines, please send in your order. We'll do the best we can. Please do not call.
- Way past deadlines: We take order deadlines seriously. Please remember that old refrain and "Wait till next year!"

Visit our Website: fedcoseeds.com

- to order online.
- to download order forms and catalogs.
- for up-to-date information on backorders and out-of-stocks for all divisions.
- to access online specials that arrived too late to make the catalog.
- to see photos of some of our cultivars.



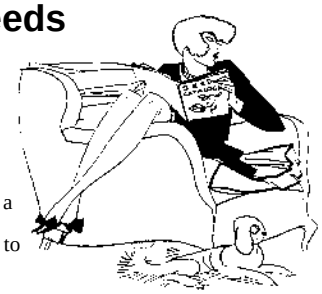
Original art: John Bunker, Laura Childs, Beehive Collective, Gene Frey, Laura Grover, Jacob Harding, Jennifer Jones, Samantha Jones, Jocelyn Langer, Alicia Letteney, Aaron McKusick, Melissa May, Yvonne Montpelier, Rachel O'Meara, Lindsay Robbins, Bria Sanborn, Sam Sanborn, Pippa Stanley, Leslie Stem, Sue Szwed, Ginger Brooks Takahashi, Gabriel Willow
Seeds copy: CR Lawn
Seeds cultivar selection: Roberta Bailey, Nikos Kavanya, CR Lawn
Moose Tubers copy: Margaret Liebman
OGS copy: David Shipman
Editor: Susan Kiralis
Layout: Laura Childs, Gene Frey, Alicia Letteney, Bria Sanborn



For our cover and some of the artwork featured in this year's catalog, credit goes to the Hall School 5th graders: Brooke, Dylan, Emma, Jasmine, Jeff, Jeremiah, Justice, Justin, Kevon, Kwayah, Liam, Lindsay, Logan J, Logan R, Miranda, Nathan, Terri and Tyler; also to Abbi, Avaline, Camella, Jonah and Max. Special thanks go to both teacher Mary Dunn and Fedco staffer Ellen Paul for their enthusiasm.

Russell Libby's life and example touched and inspired all of us at Fedco. He was a friend, neighbor and colleague.

How to Order Seeds



- Order online or use our 2014 seed order form in the center, page 75. **Please, no lists.**
- Order books and cover crop seed from Organic Growers Supply, see p. 4.

We will charge your credit card when we receive your order. We will send you a bill or a refund for any adjustments as each order is completed. We do not charge the adjustments to your credit card.

New This Year

- We hope to be able to ship to Canada after Jan. 27. Consult our website for details.
- Some new items may arrive after our catalog goes to press. Consult our website for availability, prices and variety descriptions.
- We will match any refunds donated to MOFGA.
- MOFGA members: we will donate 1% of your order total to MOFGA.

Deadlines

- Peak-season orders (by mail & online) accepted thru Friday, March 21.
- Off-peak orders online only until Sept. 30 (limited selection, prices on items 1-6049 good till Sept. 30, 2014. 2015 catalog comes out in December.)

Discounts

All discounts are figured from the subtotal on your order sheet.

Volume discounts:

Orders over $100 deduct 10%
Orders over $200 deduct 15%
Orders over $300 deduct 20%
Orders over $600 deduct 22%
Orders over $1000 deduct 24%
Orders over $2500 deduct 25%

Repeat orders over $50 qualify for the same volume discount as the first order, provided they are to the same address.

Consumer member discount: Consumer members of the Fedco Cooperative deduct 1%. To join, see page 7.

Handling Charges

• All seed orders under $30 add $5 handling charge. This charge applies regardless of how much you ordered from other divisions.

"How great! Free shipping even to us in Alaska! You are the only company I know to do that."
–Tova Henry, Eagle, AK

Group orders See page 74.

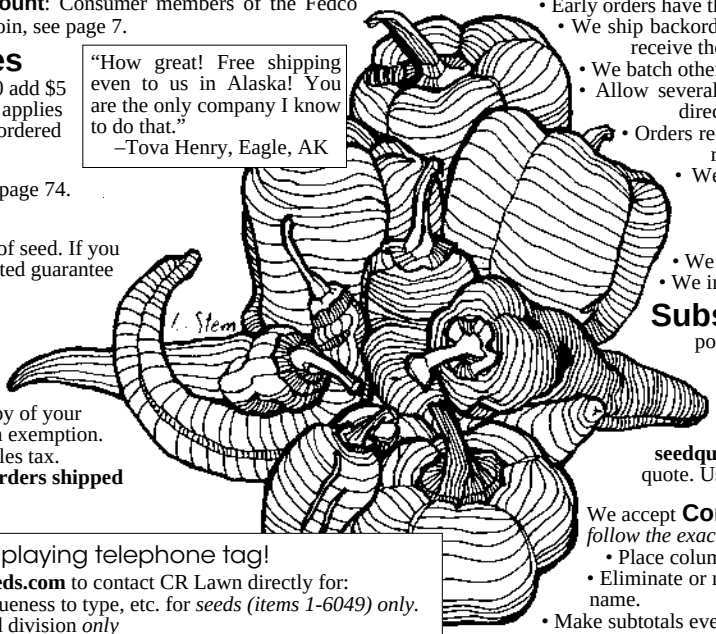
No Returns

• No returns or exchanges of seed. If you bought it, it's yours! See limited guarantee for defective products, only.

Sales tax

Maine residents and pickup customers only pay 5.5% on **all** seed. Maine farms and retailers: Please send us a copy of your state resale certificate or farm exemption. Otherwise we must charge sales tax.

There is no sales tax on orders shipped outside of Maine.



Delivery

UPS/Priority Mail

- **Free shipping for seed orders over $30 (items 100-6049).**
- We ship via UPS ground or USPS Priority Mail; our choice, based on weight.
- We pull and ship orders according to the date we receive them.
- After December, we ship orders as soon as possible, often within one week of receipt, always within two weeks.
- **We begin daily shipping of seed orders on Jan. 7.**
- If you'd like us to hold your order for a later shipping date, please attach a note to your order form.
- From May to early October we ship once a week, usually Wednesday.
- Missing your shipment? Allow 2–3 weeks from your mailing date, then contact us.
- Shipping to Canada? Consult our website for details. We hope to have a program in place by Jan. 27.

PICKUP Come to our warehouse in Clinton. See the map on page 4.

Seeds and OGS pickup peak season We will send a confirmation postcard with directions and your order number when your order is ready to pick up (within 1–2 weeks of receipt of order). Pick up at our warehouse, **Wednesdays and Fridays only** through May 2, 9:00–3:00. Sorry, no other weekdays or weekends, except Tree Sale.

Tree Sale pickup Friday & Saturday, April 25–26 (preorder customers only), and May 2-3 (Public Tree Sale) 9:00-3:00 each day. Order by April 11. *Note: Seeds will be at the Seeds warehouse up the hill, not at the new Trees warehouse.*

Seeds pickup off-peak season After the Public Tree Sale, Wednesdays only, from 9:00–noon, through September.

OGS pickup off-peak season After the Public Tree Sale, Tuesdays, Wednesdays, Thursdays only, from 9:00–3:00.

Backorders are items not available at time of shipment that come in later. Our aim is to minimize them.

- For orders with only one A-size or B-size packet on backorder we will automatically out-of-stock the item, and complete the order.
- Early orders have the most backorders.
- We ship backordered items needing an early start ASAP after we receive them.
- We batch other backordered items to reduce our shipping costs.
- Allow several weeks after receipt of your first shipment for direct-seeded backorder items.
- Orders received after March 7 will be filled from available remaining stock. No backorders.
- We will ship all backorders by March 21. Please contact us if you are still missing any backorders or have not received a refund by April 4.
- We enclose your INVOICE with the first shipment.
- We include any REFUND with the final shipment.

Substitutions See p. 74 for our substitution policy.

Bulk Orders

• To order quantities of four or more times the largest size listed here please email **seedquality@fedcoseeds.com** for availability and price quote. Use a line on the order form for each quoted deal.

We accept **Computer-Generated Order Forms** that *follow the exact format* of our order form.

- Place columns in the same order with the same information.
- Eliminate or move to the right added information, such as item name.
- Make subtotals every 20th, 40th, 60th, 106th, 152nd, 200th item.
- Insert breaks every fourth item with a heavy line or by skipping a line.

Using a spread sheet to order? Please see p. 10 for item number changes and adjust your spreadsheet *before* you order.

Avoid playing telephone tag!

Use **seedquality@fedcoseeds.com** to contact CR Lawn directly for:

- Quality issues: germ, trueness to type, etc. for *seeds (items 1-6049) only.*
- Bulk price quotes: Seed division *only*
- Seed rack orders
- Seed school store orders
- Variety suggestions
- Press contacts

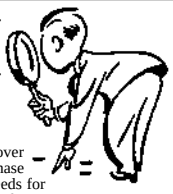
For OGS or potato problems, requests for donations and other queries: use Fedco Facilitation **questions@fedcoseeds.com**.

During peak season we respond quickly. During off-season, response time is irregular, but using email will get a quicker reply than phoning.

Have a Seed Quality Problem?

- Ask yourself: Where and when did I get the seed? How did I store it?
- Email CR Lawn at **seedquality@fedcoseeds.com**.
- Please report it *as soon as you become aware of it* so that we can help you *and other people who may be having the same problem.*
- Please supply as much *specific information* as you can about what went wrong and how it went wrong so that we can diagnose the problem and correct it in the future. As a minimum we need to know your *order number*, the *variety name, size of packet* bought, *lot number* if available, the *nature of the problem* and your *address* to refund you.

Fedco Seeds guarantees that all items we offer are fully satisfactory. If you are dissatisfied because of any product defect, we will either replace the item or refund the purchase price.



Limitation of Liability

Because good results depend upon weather, soil and cultural practices over which we have no control, we limit our liability in all instances to the purchase price of the seeds, as is customary in the seed trade. The liability of Fedco Seeds for breach of warranty, or any loss or damages arising out of the purchase or use of our products, including loss or damages resulting from any negligence whatsoever on our part, or strict liability in tort, shall be limited to the purchase price. By acceptance of the merchandise, the buyer acknowledges that the limitations and disclaimers herein described are conditions of sale, and that they constitute the entire agreement between the parties regarding any warranty or liability.

Claims for errors in your order must be presented within 30 days of receipt of your order. Claims for defects in Fedco Seeds' products should be presented to Fedco Seeds as soon as possible after discovery. Failure to assert claims within 30 days after discovery renders this warranty null and void.

How To Order Seed Potatoes from Moose Tubers

- For mail orders please use the order blank in the center of the catalog on page 77.
- Introduction on p. 110, descriptions begin on page 113.

Order online at **fedcoseeds.com**.

We do not retain any credit card information in our files. We will charge all orders as we receive them. We will send you a bill or a refund for any adjustments when we ship your order. We cannot charge the adjustments to your credit card.

Moose Tubers Deadlines

Orders **received** by: qualify for:
February 28 Volume discounts, best selection, early April shipping
March 21 Final orders for the season, potato supply limited

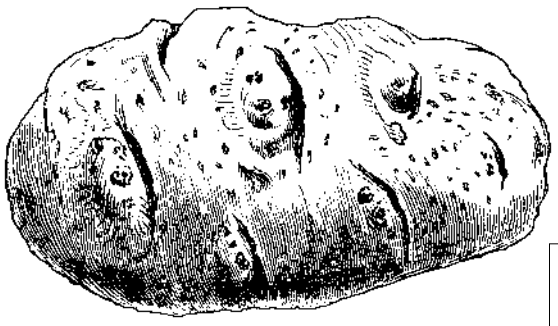
Moose Tubers Discounts

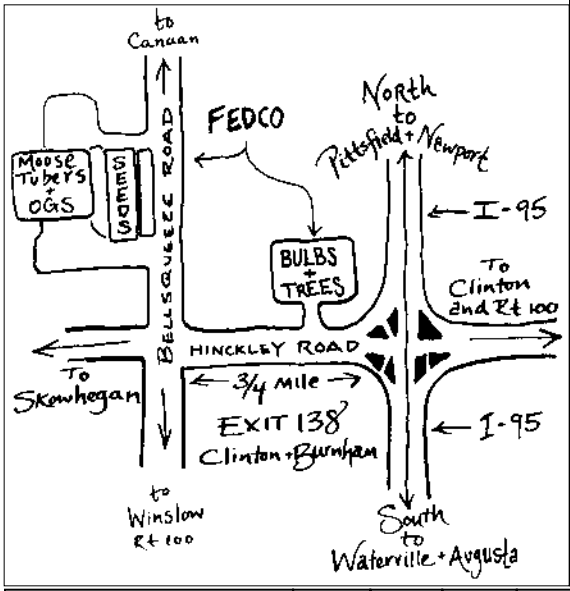
- We must receive your order by Feb. 28 to qualify for discounts.
  Orders over $200 deduct 5%
  Orders over $400 deduct 10%
  Orders over $850 deduct 15%

For amounts over 1000 lbs, please download our bulk price list or call or write for one.

Moose Tubers Shipping

- **We begin shipping Moose Tubers orders in early April.**
- We cannot ship before that; please do not ask us to do so.
- We ship common carrier orders beginning April 1.
- We will ship orders received by Feb. 28 by April 15.
- We will ship orders received after March 1 beginning April 15.





To Order Supplies & Cover Crops from Organic Growers Supply

- For mail orders please use the order blank in the center of the catalog on page 79.
- Order by April 23 for pickup at the Tree Sale.
- There is no final order deadline for OGS. After the Tree Sale, the OGS warehouse will be open Tuesdays, Wednesdays and Thursdays from 9:00–3:00 for pickups and walk-in customers.
- Introduction on p. 118, descriptions begin on p. 120.

OGS Discounts

- There is no deadline for discounts.
  Orders over $200 deduct 5%
  Orders over $400 deduct 10%
  Orders over $800 deduct 15%
  Orders over $1600 deduct 20%
  Orders over $2500 call for a quote.

OGS Shipping

- **We begin daily shipping of Organic Growers Supply orders on Jan. 13.**
- Generally we will ship your order within one week.
- From mid-May through December we ship on Tues, Wed. & Thurs.

OGS prices are subject to change without notice. 2014 prices go into effect in November 2013. Check online for updates.

Sales tax: Maine residents and pickup customers only! All items are taxable. No tax on orders shipped out of state. Maine farmers: Please send us a copy of your state resale certificate or farm exemption. Otherwise we must charge sales tax.

- Contact us if you need more order forms or the Moose Tubers bulk price list, or download them from the web: **fedcoseeds.com**.
- Be sure to include shipping charges (see chart below).
- **Groups:** Order online, see our website for details; or mail us all the individual orders from your group along with one payment and one order form as a cover sheet for group totals and shipping address. We will ship individually packaged orders *to one address*. Group gets volume discount and shipping rates based on the combined total. We recommend making copies of orders before sending them.

Shipping

- We prefer to ship via **UPS** ground. Orders under 2 lb will ship by USPS **Priority Mail**.
- Prices do not include shipping. Use the chart below to figure shipping costs.
- We ship all orders to **Alaska** and **Hawaii** by **Priority Mail**.
- We do not use parcel post for shipping. If UPS can't find your house, please arrange delivery to your workplace or a neighbor, or pay the Priority Mail rates.
- **If you require Priority Mail, use the rates for AK and HI.**

Common Carrier for large orders. Delivery by tractor-trailer with 53' box. You must be able to take your load off the truck. If you need a straight truck or a lift-gate, there is a significant surcharge. Call for a quote.

- In New England, we have flat rates for pallets weighing up to 2000 lb. ME, $92; NH & MA, $102; VT, $113; RI, $102; CT, $120; NY (zip codes beginning with 105-109, 120-149) $135. For home or school deliveries, add $100 per pallet.
- For delivery to other states: If your shipment weighs more than 1000 lb, call us with the estimated weight and the destination zip code. We will check with trucking companies and quote you a price. In some instances UPS will be cheaper. Include with your order a phone number where you can be reached during the day.

Pickup

OGS orders We will send a postcard (usually within 2 weeks of receiving your order) with directions and your order number when your order is ready to pick up. From Jan. 3 through May 2 you may come **Wednesdays or Fridays** 9:00–3:00, or at the Tree Sale. If your order is over 500 lb, please call the day before you plan to come or be prepared to wait.

Moose Tubers orders will be ready for pickup **at the Tree Sale**. If you need your order before then, call to make arrangements. Fri and Sat, April 25–26, from 9:00–3:00 are reserved for customers with orders to pick up. Public Tree Sale days are Fri and Sat, May 2–3, from 9:00–3:00. We will send a postcard with directions and your order number.

- We do **not** ship to **Canada**, and will not provide materials required for importation permits.

If your order weighs ☞	0-2 lbs.	up to	up to	up to	up to	up to	up to	up to	up to	over	over	over
And your zip code begins with:		5 lbs.	10 lbs.	15 lbs.	20 lbs.	25 lbs.	30 lbs.	35 lbs.	40 lbs.	40 lbs.	200 lbs.	500 lbs.
038-049	$5.80	$12.50	$13.65	$14.45	$15.25	$16.40	$17.35	$18.30	$19.20	48¢/lb	43¢/lb	39¢/lb
010-037,050-069,119-136	$5.80	$13.00	$13.95	$15.15	$16.60	$18.10	$19.50	$20.95	$22.25	56¢/lb	49¢/lb	45¢/lb
004-005,070-118,137-232	$5.80	$13.85	$14.65	$15.45	$17.25	$19.00	$20.95	$22.70	$24.55	62¢/lb	52¢/lb	47¢/lb
233-298,400-499,600-619	$5.80	$14.35	$15.30	$16.60	$19.25	$21.55	$23.90	$26.25	$28.50	72¢/lb	58¢/lb	52¢/lb
299-399,500-574,620-687	$5.80	$14.65	$16.30	$19.20	$22.40	$25.65	$28.75	$31.85	$34.80	87¢/lb	67¢/lb	61¢/lb
575-593,688-778	$5.80	$15.15	$18.25	$21.80	$25.45	$29.05	$32.45	$36.00	$39.70	$1.00/lb	75¢/lb	67¢/lb
594-599,779-961,970-994	$5.80	$16.00	$19.70	$24.00	$28.55	$33.10	$37.65	$41.80	$44.95	$1.13/lb	84¢/lb	75¢/lb
AK, HI & Priority Mail	$5.80	$16.00	$19.70	$24.00	$28.55	$33.10	$37.65	$48.75	$53.25	$1.85/lb		

For larger orders, consider Common Carrier. Up to 2000 lbs:
ME $92.00
MA & NH $102.00
VT $113.00
RI $102.00
CT $120.00
NY(except NYC) $135.00
For other locations call us at 207-426-9900 for more information.

Seed Saving Organizations

The Seed Savers Exchange 3094 N Winn Rd, Decorah, IA 52101, (563) 382-5990, seedsavers.org. A network of gardeners and plant collectors who maintain and distribute rare varieties of food crops. Their 2013 Yearbook lists members who offer a total of 12,495 different vegetable varieties. The SSE houses their larger collection at their 890-acre Heritage Farm. Annual membership is $40. **The Flower and Herb Exchange** has been re-united into the Yearbook.

The Scatterseed Project 39 Bailey Rd, Industry, ME 04938. A project for conserving genetic diversity. Scatterseed maintains ~1100 varieties of peas and 700 of potatoes among its over 3000 plant varieties. Scatterseed is currently struggling to recover from a two-year funding hiatus, and donations are needed more than ever to rescue the collections it maintains. For more information, contact Will Bonsall at wabonsall@gmail.com.

Seeds of Diversity Canada PO Box 36, Station Q, Toronto, ON M4T 2L7, Canada, (866) 509-7333, www.seeds.ca. Dedicated to the conservation, documentation and use of plants with Canadian significance. Promotes a pollinator observation program and a Canadian tomato program, sponsors Seedy Saturdays. Publishes *Seeds of Diversity Magazine* plus a 1500+ variety seed exchange directory. Annual membership $40.

The Farmington (ME) Seed Savers Group A group of gardeners and small farmers focused on education and on preserving vegetable varieties suited to our region. They offer an open-to-the-public educational program during the winter. For information about meetings contact amy@whitehillfarm.com or ros.rosalie@gmail.com.

The Grassroots Seed Network 2470 Industry Rd, Starks, ME 04911, (207) 491-4259. A new organization committed to preserving our seed heritage, democratically run by its Listed Members. It is in great need of start-up donations, as it intends to offer its first catalog this year. To learn how to become a Listed Member, or for more information, contact Yaicha Cowell-Sarofeen, grassrootsseednetwork@gmail.com.

Seed Production and On-Farm Crop Improvement

Organic Seed Alliance (OSA) PO Box 722, Port Townsend, WA 98368, (360) 385-7192, seedalliance.org. Sponsors a biennial seed growers conference and offers workshops on seed production and plant improvement. Conducts collaborative research on breeding.

The Family Farmers Seed Cooperative (FFSC) PO Box 67, Williams, OR 97544, (541) 233-4249, organicseedcoop.com. A farmer-owned and -managed seed production and marketing cooperative to foster the development and improvement of open-pollinated public domain varieties suitable for organic production systems and to produce and distribute high-quality open-pollinated organic seed. "The selection process never stops" is their mantra.

Northern Organic Vegetable Improvement Collaborative (NOVIC) eOrganic.info/novic. A collaboration of Cornell University's Department of Plant Breeding, Oregon State University's Department of Horticulture, the University of Wisconsin's Department of Agronomy, the Organic Seed Alliance and the USDA-ARS Plant Genetic Resources Unit at Geneva, NY. Making available improved varieties for organic farmers with disease resistance, flavor, nutritional qualities and high productivity.

Heritage Wheat Conservancy growseed.org. A seedbank of delicious rare landrace grains originally from Europe that were selected under SARE funding for climate-resilience, high yield and baking quality in Northeast organic systems. Contact: growseed@yahoo.com.

Useful Publications

Growing for Market PO Box 3747, Lawrence, KS 66046, (800) 307-8949, growingformarket.com. Published 10 times/year, year's subscription is $36 by mail, $30 electronically. Essential for market growers: what's hot, what's not, how to do it and what it'll cost.

Hort Ideas See page 6.

The Avant Gardener Under the new editorship of Derek Fell, PO Box 525, Pipersville, PA 18947, avantgardener.info, electronic only. Published monthly, annual subscription is $28. Keep abreast of horticultural trends.

Kitchen Gardeners International 3 Powderhorn Dr, Scarborough, ME 04074, (207) 956-0606, kgi.org. Has forums and Q&As useful for beginning gardeners.

Information on Genetic Engineering

ETC Group (Action Group on Erosion, Technology and Concentration) 180 Metcalfe St, Suite 206, Ottawa, ON K2P 1P5, Canada (613) 241-2267, etcgroup.org. International non-governmental watchdog organization monitors multinationals and governments on biopiracy, nanotechnology, synthetic biology, patenting life forms, terminator and exorcist technology, and other geoengineering experiments.

Union of Concerned Scientists 2 Brattle Sq, Cambridge, MA 02138, (617) 547-5552, ucsusa.org. An alliance of citizens and scientists who research and evaluate the risks and benefits of biotechnology in agriculture among other topics in science and public safety. Published *Failure to Yield*, concluding that "traditional breeding outperforms genetic engineering hands down," casting great doubt on claims that genetic engineering can feed the world or even significantly increase food production in the foreseeable future.

Organic Consumers Association 6771 South Silver Hill Dr, Finland, MN 55603, (218) 226-4164, organicconsumers.org. Public interest organization focused on safeguarding our food. Their e-newsletter *Organic Bytes* is a great way to stay aware of corporate assaults on our food supply. They have supported initiatives in California and Washington State to pass mandatory GMO labeling laws and started a "Boycott the Brands" campaign against corporations who donated money to oppose labeling.

The Center for Food Safety 660 Pennsylvania Ave SE #302, Washington, DC 20003, (202) 547-9359, centerforfoodsafety.org. Works through legal action and public education to maintain safe food. Initiated the "Just Label It" campaign, justlabelit.org, supporting mandatory labeling of GE foods. Instrumental in legislative campaigns all across the country.

Alternatives to Organic Certification

Certified Naturally Grown (CNG) 540 President St. 3rd floor, Brooklyn, NY 11215, naturallygrown.org. Instead of third-party certification, direct market farmers who sell to local markets inspect one another. Apply online or contact Alice Varon, (845) 687-2058 or by email at info@naturallygrown.org.

Participatory Guarantee Systems (PGS) An international movement to decentralize and simplify certification so that it is available to small farms and poor farmers selling directly to consumers. Most PGS farms have an educational visit from a mixed group of fellow farmers and consumers rather than an inspection. The guarantee is connected with developing local markets and empowering farmers. See the PGS section of the website for the International Federation of Organic Agriculture Movements, IFOAM.org.

The Farmer's Pledge to practice ecologically sound farming. nofany.org/farmers-pledge.

Domestic Fair Trade Food Justice Certified or Food Justice Pledge: The Agricultural Justice Project offers domestic fair trade certification for food businesses and large farms, or a participatory pledge for small-scale direct sales farms with little hired labor. To read the standards or contact the nearest certifier see agriculturaljusticeproject.org.

Organic Farming Organizations

MOFGA (Maine Organic Farmers and Gardeners Association) PO Box 170, Unity, ME 04988, (207) 568-4142, mofga.org. Works to promote sustainable agriculture through legislative and educational initiatives, annual sponsorship of the Common Ground Country Fair, publication of its quarterly newspaper, and maintenance of farm apprenticeship, journeyperson and certification programs. Maintains local chapters.

NOFA (Northeast Organic Farming Association) c/o Bill Duesing, Box 164, Stevenson, CT 06491, (203) 888-5146, nofa.org. For the rest of the Northeast what MOFGA is for Maine. Maintains state chapters in VT, NH, MA, RI, CT, NY and NJ (also serves PA). Sponsors educational conferences each summer and winter, and publishes a quarterly newspaper, *The Natural Farmer*.

PASA (Pennsylvania Association for Sustainable Agriculture) PO Box 419, Millheim, PA 16854, (814) 349-9856, pasafarming.org. Check out Executive Director Brian Snyder's Write to Farm blog: probably the best writing on food policy issues in the country, writetofarm.com.

OEFFA (Ohio Ecological Food & Farm Association) 41 Croswell Rd, Columbus, OH 43214, (614) 421-2022, oeffa.org.

VABF (Virginia Association for Biological Farming) 9501 Deer Range Rd, Moseley, VA 23120, vabf.org.

CFSA (Carolina Farm Stewardship Association) PO Box 448, Pittsboro, NC 27312, (919) 542-2402, carolinafarmstewards.org. North and South Carolina's organic organization.

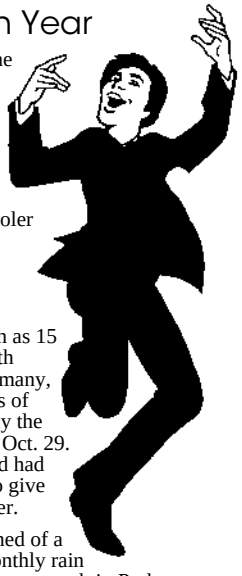
The Bio-Dynamic Farming & Gardening Association, 1661 N. Water St, Suite 307, Milwaukee, WI 53202, (262) 649-9212, biodynamics.com. Sponsors annual conference on topics of interest to biodynamic growers and publishes a quarterly journal.

Northeast Sustainable Agriculture Working Group Ruth Katz, Coordinator, PO Box 334, Irvington, NY 10533 (914) 231-9206, ngfn.org. Works toward a sustainable regional food and agriculture system.

Annual membership rates for MOFGA and NOFA. You can join when you order; list names and addresses on a separate sheet, indicate new membership or renewal, add total on order form.

state	individual	family	supporting	other	
VT	30	40	100	15-25	basic/no TNF sub
NH	35	75	250	25	basic/no TNF sub
MA	40	50	250	25	low income
RI	25	35	50	20	student/senior
CT	35	50	150	25	student/senior
NY	40	60	125	20	stu/sen/low inc
NJ	40	70	150	20	student/intern
ME	35	50	120	20	stu/sen/low inc

Welcome to Fedco's 36th Year



2012: Hottest year on record and worst drought since the 1950s. Broke the previous record in 1998 by a full degree, an unprecedented margin. As if Bobby Bonds, whether on steroids or not, had hit 85 homers in one season.

2013: Quite different. We should have guessed when winter gave way so grudgingly. Our chilly April was nothing like that of 2012 and set the tone for a much cooler season. Whether in Kentucky, Maine or Massachusetts, 'twas another strange one, characterized by extreme temperature fluctuations, excessive moisture and continued unpredictability.

May started out gorgeous, soon turned bizarre. As much as 15 inches of rain fell from mid-May through mid-June, with additional deluges in August and early September. For many, the lovely months of early fall were season savers. Parts of Central Maine cruised through September, received only the mildest mid-October frosts and did not shut down until Oct. 29. The autumn weather of my Southern Tier NY childhood had come all the way north to Central Maine, as reluctant to give in to harsher weather as spring had been to banish winter.

In Gravel Switch, KY, Greg and Pat Williams complained of a cold wet July with a high of only 66˚ on the 4th and monthly rain of more than 11 inches. "Global weirding for sure! Way up north in Parkman, ME, Jason Kafka referred to his warm October as "going extra innings." He was ready to be done, but only after finishing strong like the champion Red Sox. –CR Lawn

In Appreciation of Greg and Pat Williams

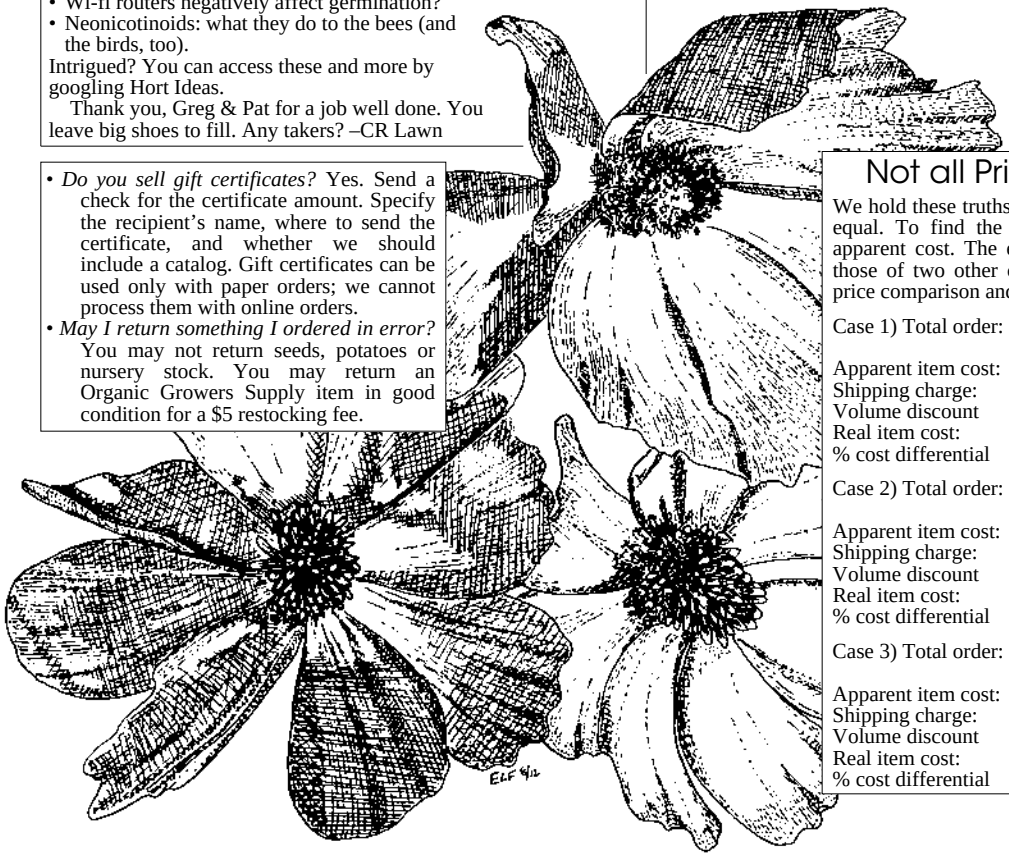
After thirty years Greg and Pat Williams are ceasing publication of their magnificent monthly newsletter *Hort Ideas.* How often have they inspired me to think about the larger issues in our field! A brief précis of some topics in the past year will suffice to express their breadth and my admiration:

- A pollen-recognition system to block contamination by transgenic corn.
- Vegetables can tell time (even after being harvested!). Plants have circadian rhythms and are able to do arithmetic.
- The effects of climate change on agriculture.
- On preserving late-blight-infected tomatoes and potatoes.
- Is it safe to eat produce from flooded gardens?
- Safety tips for senior gardeners.
- The opposite of drain tile: how to slow water drainage and hold moisture in.
- Wi-fi routers negatively affect germination?
- Neonicotinoids: what they do to the bees (and the birds, too).

Intrigued? You can access these and more by googling Hort Ideas.

Thank you, Greg & Pat for a job well done. You leave big shoes to fill. Any takers? –CR Lawn

- *Do you sell gift certificates?* Yes. Send a check for the certificate amount. Specify the recipient's name, where to send the certificate, and whether we should include a catalog. Gift certificates can be used only with paper orders; we cannot process them with online orders.
- *May I return something I ordered in error?* You may not return seeds, potatoes or nursery stock. You may return an Organic Growers Supply item in good condition for a $5 restocking fee.



We Love to Hear from You

and often respond to your order comments, emails and letters. Your ideas and suggestions stimulate our thinking and help us to improve our catalogs, products and service. Here are more ways you can help us:

- Suggest new varieties.
- Help us fill missing niches.
- Tell us how we can improve service.
- Become a trial gardener. We are interested in experienced successful gardeners with good record-keeping skills. We discourage organic purists because often we get fungicide-treated trial packets from suppliers. We give preference to trialers from Maine and other cold-climate states who can test varieties in the growing conditions of the primary region we serve. For 2014 we need trialers of annual and perennial flowers, radishes, beets and melons.
- Send us seed of an heirloom variety which you revere or think has commercial potential.
- Send us old seed catalogs, farm books or classic references (pre-1960, please).

For more details, consult our website **fedcoseeds.com**. Click on **Fedco Seeds** and go to the **Catalog Corner** link on the left. We have also published information about our quality-control program there.

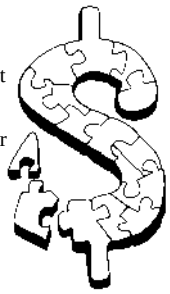
We Support Organic Agriculture

Our most concrete way of doing so (besides maintaining our network of certified organic seed growers) is to rededicate our support to MOFGA (the Maine Organic Farmers and Gardeners Association), long the premier organic organization in the country. To that end we have made a 5-year pledge totaling at least $50,000. You can help us by **donating all or part of your refund**— check the box on the totals page of your order form. *We will match your refund donation dollar for dollar.*

A second way to benefit MOFGA is our donation line. On the bottom of the totals page of your Seeds order form we have left a line for making an optional **donation** to MOFGA.

A third way is to join MOFGA as a member on the line on our order form for that purpose. **If you join or are already a MOFGA member we will donate 1% of your Seeds-division purchase to MOFGA.**

Where Our Seed Dollars Go



Of our $586,000 expended on seeds in 2011-12, 30.7% went to 22 international suppliers, 37.7% went to 34 domestic wholesalers and retailers and 31.6% to our 64 small-farm seed growers. The list below illustrates the percentage of our seed dollars going to small farms over the years:

1991	0.9%	2002	14.4%
1994	5.5%	2007	20.8%
1998	9.3%	2013	28.1%

Not all Prices are Created Equal

We hold these truths to be self-evident: Not all prices are created equal. To find the real prices one must dig deeper than the apparent cost. The examples below, based on our policies and those of two other companies in 2013, show how to do a real price comparison and what results:

Case 1) Total order: $50

	Fedco	Alt #1	Alt #2
Apparent item cost:	$40.00	$40.00	$40.00
Shipping charge:	0.00	8.00	7.16
Volume discount	0.00	0.00	0.00
Real item cost:	40.00	48.00	47.16
% cost differential	0	+20.0%	+17.9%

Case 2) Total order: $150

	Fedco	Alt #1	Alt #2
Apparent item cost:	$40.00	$40.00	$40.00
Shipping charge:	0.00	4.26	3.72
Volume discount	-4.00	0.00	0.00
Real item cost:	36.00	44.26	43.72
% cost differential	0	+22.9%	+21.4%

Case 3) Total order: $300

	Fedco	Alt #1	Alt #2
Apparent item cost:	$40.00	$40.00	$40.00
Shipping charge:	0.00	0.00	2.26
Volume discount	-8.00	0.00	0.00
Real item cost:	32.00	40.00	42.26
% cost differential	0	+25.0%	+32.1%

Sell Seeds for a Green School Fundraiser!

Tired of candy sales and want a school fund-raiser with a wholesome green message? **Start a school seed store.** We offer three options:

• Packet Seed Store: Purchase multiple packets and re-sell them at a profit. Get our volume discount plus 5%.

• Bulk Seed Store: 29 participants in 2013 from 12 states. Get our volume discount plus 5%. See how it works:

"The Thomaston Grammar School 5th graders sold your seeds this year as a fundraiser for our very own school garden. We purchased your seeds in bulk, then developed our own "seed company." We designed our packets, worked hard to sell, and packaged our orders. The learning was multifaceted, and the experience, superb! We sold our packets for $1 each. We are pleased to report that our company made over $1,400 in seed sales! We are now planning on building a water collection/roofing system for our school garden. We also hope to build a shed to store our tools!"

—Lynn Snow, Thomaston Grammar School

You may order by mail or online with either option. There is no special order deadline, but plan to order early so you will have the packets ready in February and March when your customers are thinking gardens. We can help you select varieties.

• Convenience Pre-order: 81 participants in 2012 distributed more than 22,000 seed packets and raised around $20,000 for their groups. We customize an order form with 25 popular easy-to-grow varieties for each participating group. We offer two options: our regular selection or an all-organic listing. Choose one or both, download and circulate to take orders from your community. We split the take with your school group, PTA or non-profit.

• *You must make a commitment to sell at least 100 packets.*

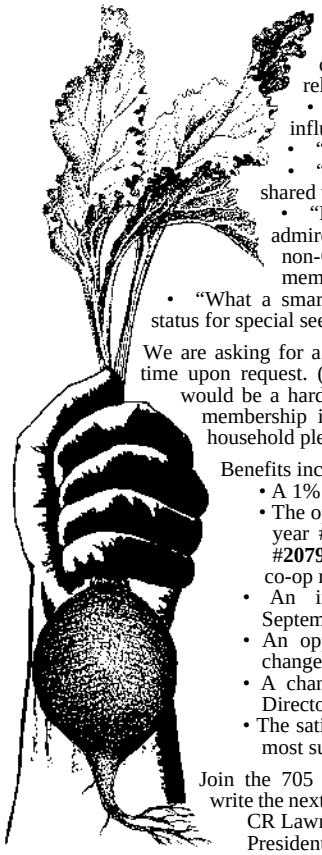
• **The deadline to contact us with intent to participate is Feb. 21 and to submit your order is March 14.**

We will work with any school, PTA or other interested *nonprofit youth group*. Contact CR Lawn by email at *seedquality@fedcoseeds.com*. Please, no calls.

See **growseed.org/seedstewards.html** for seed curriculum and educational workshops.

Join our Cooperative as a Consumer Member!

Why join Fedco? We'll let some of those who joined speak for themselves:



• "I'm proud to join Fedco as a consumer member-owner…I'm also an adjunct professor in the English Department at Mercyhurst University here in Erie, PA. I can't decide what I value more about Fedco: your perennially reliable seeds or your delightfully clever product descriptions. I keep a catalog handy for when I grade papers, for comic (and grammatical) relief…Thank you for your devotion to ethical agriculture and the standards of written English." Katie Chriest

• "I've been gardening for over 40 years and have never been aware of your coop. Must have been blind or under the influence. Thank goodness I finally found you. It's never too late." Stewart Bialer, Montrose, PA

• "I cannot tell you how much I appreciate being able to buy my seed from a cooperative." Karen Linder, Onarga, IL

• "It gives me a warm feeling on a snowy night to know that, as Fedco customers & members, we are part of a community with shared values about food production and life!" Kristen Travis, Old Season Farm, W. Jefferson, NC

• "I have long ordered from Fedco Seeds and admire what you stand for: quality, local, non-GMO. So I'm happy to support you with my membership." Kathie Clark

• "What a smart incentive for membership, giving priority status for special seeds!" Truddi Greene, Chester, VT

We are asking for a $100 membership equity, refundable at any time upon request. ($105 to join online by credit card.) If this would be a hardship, there is a $25 option. Please note that membership is by household (only one membership per household please) or by farm or organization.

Benefits include:

- A 1% discount on all orders from all our divisions.
- The opportunity to buy member-only specials. This year #**710** Coral pea, #**833** Sumo snow pea and #**2079** Scarlet Keeper carrot are available to Fedco co-op members only.
- An invitation to our Annual Meeting each September.
- An opportunity to vote on any proposed by-law changes.
- A chance to vote for and serve on our Board of Directors.
- The satisfaction of owning a small part of one of the most successful new wave co-ops.

Join the 705 consumer member-owners who are helping write the next chapter of our enduring success!

CR Lawn
President, Fedco Seeds, Inc.

Yes, I want to join Fedco as a consumer member-owner!

Enclosed is a check for my refundable membership deposit of $100.

Please make membership certificate out to:

Name:_____

Address:_____

City:_____

St:_____ Zip:_____

Customer # (if you know it)_____

Email address_____

PO Box 520, Waterville ME 04903

Of Inequality, Decline and Recovery

In this catalog we honor the late Russell Libby, MOFGA's beloved Executive Director from 1995-2012. Libby, a pastoral poet in the tradition of Virgil and Wendell Berry (see our 2013 catalog), was trained at Bowdoin College as an economist. He understood that the pastoral is political and that our economic relationships determine our social possibilities. In his inimitably polite and persistent way, he never shrank from speaking truth to power.

In that spirit I dedicate this essay. If you think economic considerations don't belong in a seed catalog, think again. I don't go to national parks, didn't need a passport or need to apply for disaster aid, so the recent shutdown seemed remote to me. Until my partner Eli tried to access the GRIN database and found it shuttered. GRIN is our national genebank, one of those little-known services the federal government provides for us, an unrivalled tool for plant breeders, preservationists and guardians of crop diversity. Eli uses it a lot.

The shutdown was a tactic instigated by the Tea Party and enabled by the GOP and other interests of the 1% to try to discredit government. Their *modus operandi* is: starve it, then argue that it doesn't work, therefore shrink it further with the ultimate aim of disabling it. It is pure self-fulfilling prophecy. In the absence of government, corporations run amok with no checks on their power (see my essay "On Life and Taxes" in the 2013 catalog).

I recently saw Robert Reich's new movie *Inequality for All*. I recommend it even though its analysis and calls to action aren't sufficiently deep. Reich documents our extreme inequality of wealth, the highest of any industrial nation, and points out that:

• Both in 1928 and 2007 when inequality maxed out, an economic collapse followed. Hardly a mere coincidence.

• Since the late '70s, while corporate earnings have skyrocketed and worker productivity has increased, real wages have stagnated or dropped. Meanwhile, costs have gone way up.

• The middle class responded to this squeeze progressively: First women joined the work force. Then people worked longer hours, moonlighting. Finally, they went into debt, borrowing against their houses. When that speculative bubble collapsed in 2007, no slack remained in the system.

Reich's prescriptions include:

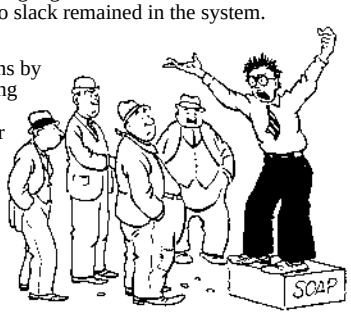
• Reversing the decline of labor unions by raising the minimum wage and instituting fairer workplace rules.

• Re-committing to public support for educating our work force.

• Repealing the Citizens United decision to chase wealth out of politics.

• Restoring fairness to our tax policies.

• Recreating a wall of separation between traditional banks and risky financial services.



Why is our economic recovery, now supposedly in its fourth year, so tepid and shallow? Reich shows how our Great Recession was only the climactic act of a Great Regression that had been ongoing since Ronald Reagan or even before. While full recovery requires a widespread restoration of confidence among those who've been hurt, that cannot happen until we address the full extent and root causes of our long decline and invest, not in the NSA, but in the WPA.

As a society, we are still in denial. A look at some key quality-of-life indices can help us grasp how far we have fallen.

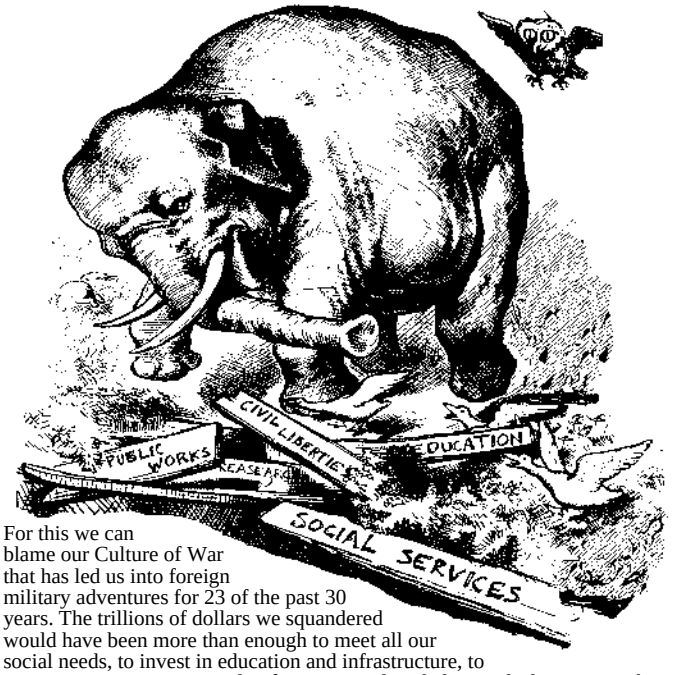
• Life expectancy. Ours is five years shorter than Japan's. 16th in 1960, we've fallen to 51st out of 222 nations in a recent British study.

• Infant mortality rate. 12th out of 29 in 1960 OECD rankings, 27th out of 30 in 2008. Singapore, Sweden, Japan, each have less than half our rate.

• Military expenditures. Our rank? 1st, of course, but the killer is we spend more than four times #2 China, and almost as much as #2–15 combined. Those nations highest in the life-quality indices spend much less on weapons and war than we: Switzerland (37th in military spending), Sweden (33rd), Singapore (22nd), Canada (14th), Italy (10th). Even Japan (5th) spends only 1.0% of its GDP compared our 4.7% and is in the top 3 in life quality.

Reich completely ignored the elephant in our economic room, our bloated military/homeland security apparatus that has grown with complete impunity for nearly a generation. We needed whistle-blower Edward Snowden to show us just how far off track we've strayed as we lost the War on Terror.

Through our self-imposed overreaction we have permitted fear of terrorists to subvert our fundamental civil liberties. Our own government has secretly violated our basic freedom as law-abiding citizens from unchecked unauthorized universal spying. Johns Hopkins Professor of Applied Economics Steve Hanke asserts these spying programs are costing each taxpayer $574 per year. For those of us who grew up in the Cold War with the indelible imprint of Khruschev pounding his shoe at the United Nations, it was the ultimate irony when Snowden, pursued by our authorities, found sanctuary in Russia, our erstwhile ideological enemy.



For this we can blame our Culture of War that has led us into foreign military adventures for 23 of the past 30 years. The trillions of dollars we squandered would have been more than enough to meet all our social needs, to invest in education and infrastructure, to maintain our economy and safety nets and to halt our decline. To make a lasting recovery we must curb our military appetite and rededicate resources to our domestic needs.

Undeclared wars of unlimited duration with unclear objectives against undefined enemies are incompatible with economic democracy. It is past time for us to declare war on the War on Terror, war on the War on Drugs, war on our ill-defined foreign military adventures, war on these unwinnable wars, war on war itself as an instrument of public policy. The awakening that averted President Obama's proposed military strike in Syria is unprecedented in my lifetime, the most hopeful sign in many years that we as a nation are coming to our senses again. Let us build on that.

If you get a chance, go see the documentary *The House I Live In.* That house is prison. Ours is the highest incarceration rate in the world, nearly 10 times Sweden's and more than 12 times Japan's. In addition to incurring the incalculable costs of lost productivity, families sundered and whole communities rent apart, we have wasted more than $1 trillion, and arrested 45 million people in 40 futile years of the War on Drugs, and we continue to blow $60 billion per year in this hapless pursuit. The quadrupling of our prison population since 1980 parallels our economic decline.

I have strayed from pastoral fields to prison walls, from agriculture to espionage and war. To bring us all back home, for 17 years I sat with Russell Libby at MOFGA meetings. What we shared most was a propensity to count, to compare, to find patterns in the relationships of things, to seek the building blocks of good social and economic policy.

As I write, the Farm Bill is again on the Congressional agenda and in contention is the National Organic Cost Share Certification Program which House Republicans have excised from the bill. The cost to fund this program at 2008-2013 levels is 3¢ per taxpayer. Are you willing to ante up your 3¢ to support organic farmers? Or maybe you'd prefer to support them without a tax increase? We can do so by freeing just 208 of our 2.3 million prisoners, each of whom costs $24,000 per year to keep jailed. Or we could withhold one quarter of one per cent from the annual budget of NSA's spooks.

A companion House bill proposes to remove 3.8 million people from the SNAP program depriving each of $1.40 per meal in assistance ($1.40 per meal? That buys about three organic beets!) For less than 4¢ per meal per taxpayer we can keep these folks in SNAP. Each dollar spent on SNAP benefits generates around $1.70 in local economic activity. We can free 10% of our prisoners or cut 57% from NSA's budget and realize the same savings as cutting SNAP. Russell Libby would have appreciated these comparisons because they are the stuff of the choices we must all make. –CR Lawn

The Poetry in the Catalog

To keep him in our thoughts for a while, we've chosen a selection of Russell Libby's poems. Of the many benefits gained from the privilege of serving on the MOFGA board, perhaps the best was the little chapbook that he sent every year around Christmas, an offering of his poems for that year. Russell's poems capture so well the quiet beauty of Maine, love of place and family and friends, and the joy of being part of something bigger than oneself. As we try to continue the work he gave himself so freely to, we can find Russell again, for a bit, in his poetry.

Our deepest thanks to Mary Anne Libby and her daughters for allowing us to make such liberal use of Russell's poems and for allowing us to to take up so much of his time.

–CR Lawn and David Shipman

Blessing of the Redwoods

I'm not sure
it's appropriate
to ask for great longevity,
or the ability to touch
so much of the sky at once,
or the patience to stand straight
and withstand fire and drought
and rain, so much rain,
so I will simply ask
to be one
with this world
for as long
as I am
here.

The "Grand Bargain" is Grand Larceny

When politicians propose a "Grand Bargain" to reign in "entitlements" we should ask, "Grand" for whom? Such a "bargain" would be grand for the 1%, disastrous for the rest of us. Social Security is already the best bargain we as a society have ever made, our most-loved and most successful federal program, a single-payer insurance system for us all, our social contract with each other.

When we purchase private insurance, we rightfully expect that, should the dreaded outcome we insured against occur, our insurer will honor our premiums and pay our full benefits.

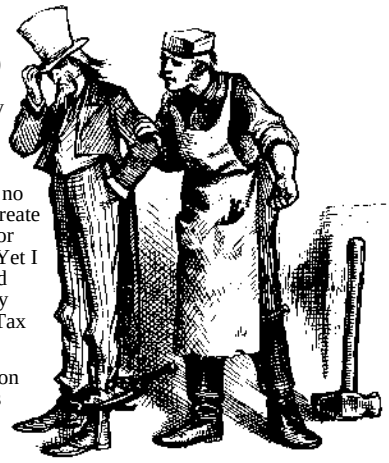
As an average middle class wage-earner, I project to receive about $15,000 a year when I turn 70. Little enough to provide real security in these times. Chained CPI could take away as much as $1,000 per year when I get older.

As employers we paid in our workers' shares in good faith. As workers we paid in our own shares in good faith. We expect our premiums will be honored. To those who would take away our benefits: remember that revolutions have been fought for less!

What kind of "bargain" would abrogate our social contract, break our government's agreement with us? That's no "grand bargain," that's grand larceny! Contact your Representatives and Senators and tell them so.

Exalt our Labor!

Tell them about these two simple provisions that would restore fairness to our Social Security system, enable it to increase benefits, and guarantee its solvency forever.



• Presently wages above $131,700 pay no Social Security tax. The working poor and middle classes pay their full share. Wealthy workers don't pay their fair share. Tax all working income equally.

• Presently unearned income pays no Social Security tax. When I work I create value. When I sell stock for a profit or receive dividends I create no value. Yet I am more heavily taxed for my earned income that creates value than for my unearned income that creates none. Tax all income, earned or not, equally.

Our society has placed higher value on capital than on our own labor. Let us exalt our labor, and elevate it to an equal footing with capital.
–CR Lawn

Fedco Joins PUBPAT Supreme Appeal

Fedco has joined other plaintiffs in petitioning the Supreme Court to review the Court of Appeals decision handed down this summer on our case against Monsanto. While the Court rejected our attempt to re-open the case, they did so only by estopping Monsanto from suing those experiencing accidental transgenic contamination of less than 1% from Monsanto genetics. If this decision holds, Monsanto cannot sue *anyone* (not just the plaintiffs in this case) who is accidentally contaminated with trace amounts of their GMOs.

If Fedco were the lone plaintiff, we probably would have accepted this result, to freeze and not risk such a significant gain. However, once any other plaintiff appeals, the decision cannot be frozen. Many plaintiffs, still hoping to get the entire case heard on its merits, decided to appeal and we joined them in solidarity. Historically, the Court hears only about 1 in 100 such appeals. Even if it does in our case, it is unlikely to reverse the Appeals Court's well-reasoned decision and revert back to the poorly-worded District Court decision that unconditionally threw out our case.

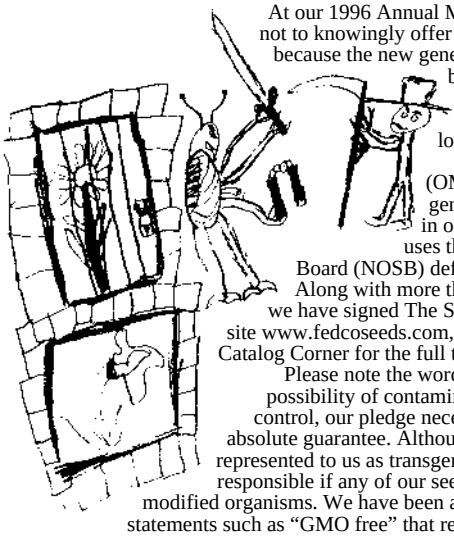
The Appeals Court decision opens up—indeed, almost invites—the possibility of a lawsuit against Monsanto by a plaintiff who suffered economic damages from more than 1% accidental contamination. A victory in such a case could transform GMO law by protecting from lawsuits all victims of GMO contamination who did not sign Monsanto's technology agreements or intentionally use their products.

For more information contact me at **crlawn@fedcoseeds.com**.

See also:
fedcoseeds.com/seeds/monsanto.htm
for our definitive 2006 statement on why we do not purchase seed from Monsanto or any of its subsidiaries. –CR Lawn

"Finally—a seed catalog that respects a higher level of intelligence!"
–Deb Knoll, Mansfield, OH

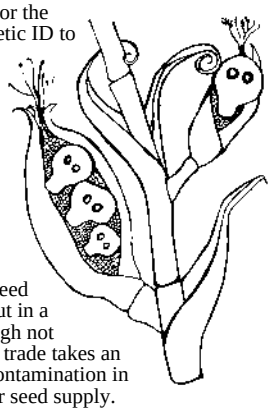
Fedco Does Not Knowingly Carry Genetically Engineered Seeds



At our 1996 Annual Meeting we voted unanimously not to knowingly offer for sale any transgenic variety because the new gene technologies pose unacceptable risks to the environment. In 1999 we affirmed and clarified that position and will follow the guidelines of the Organic Materials Review Institute (OMRI) which prohibit the use of genetically engineered organisms in organic crop production. OMRI uses the National Organic Standards Board (NOSB) definition of genetic engineering. Along with more than 150 other seed companies, we have signed The Safe Seed Pledge. See our website www.fedcoseeds.com, click on Fedco Seeds, then on Catalog Corner for the full text.

Please note the word *"knowingly."* Because of the possibility of contamination, over which we have no control, our pledge necessarily stops short of being an absolute guarantee. Although we will not sell any variety represented to us as transgenic, we will not be held legally responsible if any of our seed tests positive for genetically modified organisms. We have been advised not to sign any blanket statements such as "GMO free" that require us to state with certainty that our products are pure. Please do not submit such statements with your order. We apologize for having to split legal hairs, but we all share the reality of genetic drift.

We Test Sweet Corn and Beet Seed for Transgenic Contamination



To help ensure the purity of our seed, we have for the past dozen years employed industry leader Genetic ID to test random samples of our sweet corn lots for the presence of transgenic contamination. Because of the risks posed by production of genetically engineered Roundup Ready beets, we have added beet and chard varieties to our GE testing program.

We remove from our inventory and our catalog any lots that test positive for transgenic contamination.

A negative test result, while not *guaranteeing* genetic purity, improves your chances that the seed is uncontaminated. These tests are expensive, but in a time of genetic roulette, they are necessary though not sufficient to assure seed purity. Only if the seed trade takes an adamant position that we will not tolerate GE contamination in our product can we maintain any integrity in our seed supply.

MOFGA Wins Partial Victory in GMO Labeling Campaign

Maine is poised to become the second state to enact mandatory GMO labeling legislation. With strong Fedco support, MOFGA gained a partial victory in its GMO labeling campaign when the Maine legislature overwhelmingly passed a weakened version of LD718. Governor Paul LePage has promised in writing to sign the bill when the legislature reconvenes in January.

The legislation requires mandatory labeling of many genetically engineered food products (seeds unfortunately are exempted), but is triggered only when four other states, including the contiguous state of New Hampshire, enact similar bills.

Staffer Jessie Dowling served as on-the-ground campaign organizer, I spoke at the rally prior to the Ag Committee hearing, and both Nikos Kavanya and I testified at the hearing. Fedco committed significant financial resources to the bill in a letter targeting customers in certain key legislative districts. The Center for Food Safety channeled our customer donations of more than $2,000 back to Maine's campaign. –CR Lawn

Just Label It! Take Action!

• Live in Maine? Contact Gov. Paul LePage. Thank him for supporting mandatory labeling and urge him to sign LD718 as he has promised. Office of the Governor, 1 State House Station, Augusta, ME 04333-0001, 207-287-3531

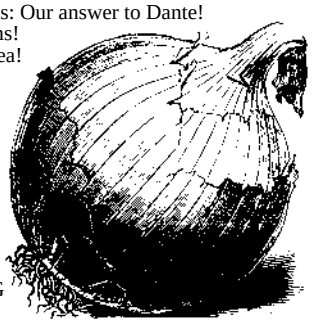
• Live in New Hampshire? Contact your state legislators. Urge them to support HB660, New Hampshire's labeling bill that will be coming up for a vote soon. Contact NOFA-NH, nofanh.org/gmo-action-alerts, to stay informed!

• Live in Massachusetts? Call your state legislators and tell them you want GMOs labeled. For action alerts, join Massachusetts Right to Know. MaRightToKnow.org

New Seed Varieties for 2014

247 Montpellier Green filet bean: A thoroughbred filly of a filet!
281 Golden Gate wax pole bean: Your gateway to waxy nirvana!
622 SugarPearl sweet corn OG: A gem of an early organic sweet corn!
1126 Diana hybrid watermelon: Diana reigns supreme!
1130 Orange Orchid hybrid watermelon: Exotic and early!
1512 Slick Pik hybrid summer squash: A yellow slicker in your squash!
2060 Rumba carrot OG: May I have this next carrot?
2212 Gloriette hybrid radish: The glory of uniform red radishes!
2243 Cheriette hybrid radish: Pick low, sweet Cheriette!
2830 Skyphos lettuce: Reach for the sky in butterhead lettuce breeding!
2852 Pandero lettuce: Pandering to lovers of baby romaine!
3246 Purple Rapa mustard gene pool: Deejay's delight!
3313 Bay Meadows hybrid broccoli: Like Seabiscuit, can't be beat in the heat!
3329 Veronica hybrid romanesco broccoli: Fibonacci doesn't fib!
3390 Tribute hybrid cabbage: We pay tribute to a magnificent cabbage!
3681 Lucky Green hybrid eggplant: Time to get lucky in your garden!
3682 Pure White hybrid eggplant: Pale perfection!
3826 Gilboa hybrid pepper OG: This boa won't constrict!
3839 Golden Star hybrid pepper: First in the class!
3917 Fireball hybrid pepper: An authorized incendiary device!
4107 Pink Princess cherry tomato: Her grace graces your palate!
4253 Aria hybrid pear tomato: Your pear tomato program hits a high note!
4322 Black Eagle wheat OG: Beautiful enough to eat!
4520 Codonopsis: Attractive vine and good medicine!
4553 Perfection fennel OG: Truly the perfect bulbing fennel!
4649 Zaatar oregano OG: Add some Middle Eastern flavor!
4654 Rhodiola: Arctic wonder takes the road south!
4677 Schisandra: Five-flavor fruit! Shazam!
4901 Bouncing Bet: Odds-on favorite bounces into your garden bed!
5023 Rose Bonbon Double Click cosmos: Rose-colored eye candy!
5028 Psyche White cosmos: We're psyched to offer this ruffled cosmos!
5142 Paradise Mix Super Elfin impatiens: Our answer to Dante!
5378 Scarlet Peony poppy: Big pompoms!
5417 Seascape salvia: Beautiful as the sea!

Back in 2014



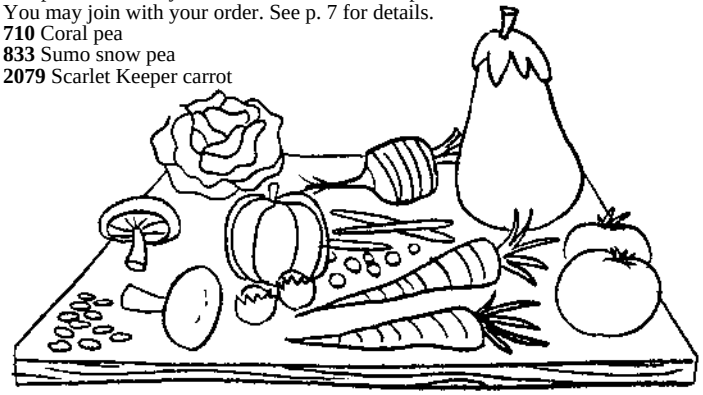
490 Tankuro black soy bean
692 Hopi Blue corn
788 Mayfair shell pea OG
1520 Lemon squash OG
2018 Tonda di Parigi carrot
2474 Clear Dawn onion OG
3099 Sea Kale
4106 Honeydrop Golden cherry tomato
4118 Green Egg Yolk cherry tomato OG
4138 Speckled Roman tomato
Some of these are in short supply; consult your catalog and order early accordingly.

More in 2014? (Maybe!)

While our catalog is frozen at its early November print deadline, our website is updated in real time! Consult fedcoseeds.com to see what else might be available and find prices and descriptions. Possibilities include Fortex pole bean, Beer Friend soybean, Lady Godiva naked-seeded pumpkin, Limba broccoli, Tashkent marigolds and more!

Co-op Member-Only Specials in 2014

Each year we make a small number of special items that are in short supply available to our co-op members only. You must be a Fedco coop member to order these items. You may join with your order. See p. 7 for details.
710 Coral pea
833 Sumo snow pea
2079 Scarlet Keeper carrot



For cultural information, see the vegetable chart on p. 81, flower charts on pp. 82–83 and herb chart on p. 84.

See **9635**, **9695**, **9753**, **9790**, **9791**, **9796**, **9830**, and **9895** in the Books section for information on seed saving and production.

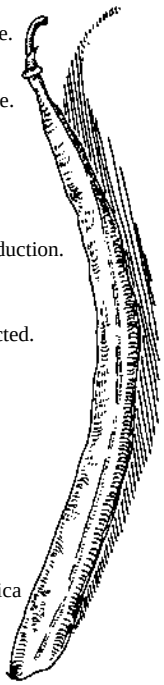
Visit Catalog Corner on our website for information about our quality-control program, and for the Safe Seed Pledge.

Go to **fedcoseeds.com**, click on **Fedco Seeds**, then click on **Catalog Corner** from the menu on the left.

Probably Your Last Chance in 2014

265 Indy Gold wax bean: We're trialing for a replacement.
332 Cannellini bean: Being replaced by #**331** Silver Cloud Cannellini.
559 Golden Bantam sweet corn: We're trialing for replacements.
632 Shasta hybrid sweet corn: It's history unless sales improve.
710 Coral pea: Supplier is discontinuing.
916 Oka muskmelon: Sales have been declining.
1594 Bitter gourd: Supplier has discontinued, trialing for replacement.
2282 Shinden Risoh daikon radish: Dropped by supplier, seeking replacement.
2441 Prisma shallots: Supplier is discontinuing, trialing to replace.
2454 Expression hybrid onion: Sales are slow.
3421 Violet Queen cauliflower: Upstaged by **#3417** Graffiti
3825 Banana Superette hybrid pepper: To be replaced by Cha Cha next year.
4230 Spring Shine hybrid tomato: Our customers never took a shine to it.
5031 Purity cosmos: Replaced by #**5028** Psyche White.
5166 Carmine larkspur: Sales have been slow.
5382 Mission Bells Cal. poppy: Our #**5381** Jelly Beans fulfills their mission.
6003 Little Marvel pea: Off-types in the production.
6017 Aurora Fire marigold: Our supplier is putting out its fire.

Dropped Varieties for 2014

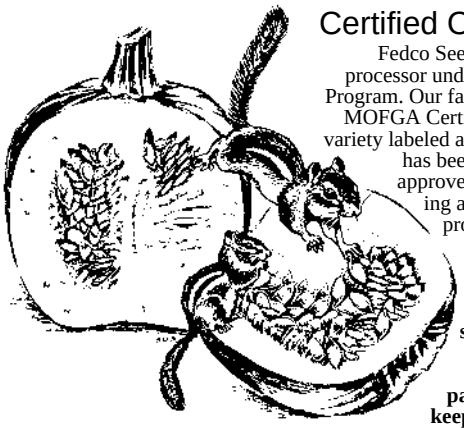


284 Gold of Bacau pole bean: Replaced by #**281** Golden Gate.
354 Aunt Jean's pole bean: Crop failure.
358 Monos Negros bean: Crop failure.
663 Japanese Hulless popcorn: No crop.
696 Garland Flint corn: Slow sales.
795 Blue Pod Capucijiner soup pea: Crop failure.
820 Green Beauty snow pea: Crop failure.
842 Mammoth Melting sugar snow pea: Off types in the production.
884 Sugar Lode snap pea: No crop.
986 Verona watermelon: No crop.
1095 Yellow Honey melon: Doomed by slow sales.
1222 de Bourbonne pickling cucumber: No new crop contracted.
2051 Nantes Fancy carrot: No crop.
2318 Gammel Gotlandsk salsify: Crop failure
2426 Siegfried leek: No crop.
2504 Bordeaux spinach: Discontinued by the supplier.
2767 Les Oreilles du Diable lettuce: Crop failure.
2792 Revolution lettuce: Off-types in the production.
2877 Marshall lettuce: No crop.
3021 Ice-Bred arugula: No production.
3232 Pung Pop mustard gene pool: Sales were slow.
3308 Premium Crop broccoli: Discontinued by supplier.
3325 Umpqua broccoli: No crop.
3329 Tipoff Romanesca broccoli: Replaced by #**3329** Veronica
3728 Staddon's Select pepper: No crop.
3755 Ho Chi Minh pepper: No crop.
4081 Mark Twain tomato: Crop failure.
4136 Vilms paste tomato: Crop failure.
4138 Casady's Folly tomato: Replaced by #**4138** Speckled Roman.
4302 Burbank Hulless barley: Crop failure; storms in the west.
4442 Spice Boys basil: Supplier has discontinued.
4510 Lemony catnip: Too little demand.
4886 Panorama Red Shades bee balm: No crop.
4923 Red Heart calendula: Slow sales at the heart of it.
5077 Scarlet flax: Slow sales.
5138 Immortelle: Slow sales prove it is mortal.
5142 Super Elfin Mix impatiens: Replaced by #**5142** Paradise Mix.
5309 Swiss Giants pansy: Replaced by #**5305** Brush Strokes.
5355 Carnation poppy: Crop failure.
5387 Tequila portulaca: Discontinued by supplier.
5389 Quaking Grass: Slow sales.
5530 Procut Lemon sunflower: Crop failure.
5668 Sightseeing veronica: Discontinued by supplier.

Catalog # Changes

Please take note if you keep your order on your spread sheet:

item	was	now
Masai bean	247	248
Giant Midori soybean	481	493
Little Marvel pea	748	6003
Plum Purple radish conventional	2252	6009
Chickendive	3075	6011
Palla di Fuoco Rossa radicchio	3186	3190
Fiesta broccoli	3313	3312
Falstaff brussels sprout	3338	3341
Red Russian kale conventional	3455	3461
Red Russian kale organic	3456	3462
White Russian kale	3459	3464
Winterbor kale	3463	3453
Beedy's Camden kale	3465	3450
Rainbow Lacinato kale	3466	3457
Galine eggplant	3681	3680
Goldie tomato	4093	4054
Purity cosmos	5031	6013
Aurora Fire marigold	5221	6017
Tiger's Eye sunflower	6441	5551



Certified Organic Seed

Fedco Seeds is a certified organic processor under the National Organic Program. Our facilities are inspected by MOFGA Certification Services. Each variety labeled as organic in our catalog has been certified by a USDA-approved agency. By maintaining an audit trail and careful procedures we ensure that our certified organic seed will not be contaminated. **If you buy organic seed because you are a certified grower, save your invoice and your packet labels so you can keep track of lot numbers to maintain your own audit trail.**

Although the rule requires organic growers to use certified-organic seed whenever it is commercially available, in practice it still leaves a wide range of choices. Many ambiguities remain in the definition of "commercially available" and in what constitutes a good faith effort to locate organic seed. Consult your regional certifier for their specific seed requirements.

Organic growers have been using different compliance strategies. Some peruse a large number of different catalogs and purchase only organic seed no matter what the cost. Others stick to fewer preferred suppliers, insist on certain favored varieties, or take quality into consideration.

Sustainably Grown Seed

All seed in our catalog offered as "certified organic" comes from certified farms. Even farms grossing under $5,000 that would otherwise be exempt from certification must get certified for us, as a processor, to label their product "certified organic."

Believing it essential to the democracy and self-reliance of our agricultural community and to our integrity as a seed supplier, we have painstakingly built our network of small seed growers over the past 20 years. Most of our growers use farm and seed revenues to supplement income from other jobs. Many gross less than $5,000 farming.

Although most practice sustainable farming methods conscientiously, some eschew certification for a variety of reasons, ideological, economic and otherwise. In this catalog we are using the ecological label **ECO** after the variety name to describe uncertified seeds grown without pesticides, herbicides or chemical fertilizers in gardens and on farms which maintain an active soil-building program. Often this seed is as sustainably grown as the certified organic seed. I hope you will continue to support both certified organic and **ECO** growers with your purchases.

We use the label **BD** for those varieties certified biodynamically grown. Some varieties have both biodynamic and organic certification and so will have the symbol **OG/BD.**

Organics in the Catalog

We list all available organic selections in this section. All variety descriptions (organic and otherwise), sizes and prices are in the main body of the catalog beginning on page 14. Sometimes we offer both conventional and certified organic seed of the same variety.

Things you should know about ordering organic:

- All organic catalog letters end with the letter 'O.' No conventional ones do.
- Organic always costs the same or more than conventional.
- If you change your mind between an organic and conventional selection of the same variety please change three things on your order: 1) the item number 2) the item letters 3) the price.

OG after cultivar name = entire lot is certified-organic seed. The certifying agency is listed in the copy. Abbreviations are:

AGRIOR: an Israeli organic inspection agency
BSO: Bay State Organic (Massachusetts)
CCOF: California Certified Organic Farmers
CO: Colorado Department of Agriculture
GOA: Global Organic Alliance
IA: Iowa Department of Land Stewardship
ICS: International Certification Services
ID: Idaho Department of Agriculture
MCCO: Monterey County (CA) Certified Organic
MD: Maryland Department of Agriculture
MOFGA: Maine Organic Farmers and Gardeners Association
MOSA: Midwest Organic Services Association
MT: Montana Department of Agriculture
NOFA (followed by state chapter): Northeast Organic Farming Association
OCIA: Organic Crop Improvement Association
OEFFA: Ohio Ecological Farm & Food Association
OT: Oregon Tilth
PA: Pennsylvania Certified Organic
QCS: Quality Certification Services (Florida)
SC: South Carolina Department of Plant Industry
SKAL: a Netherlands organic certifying agency
Stellar NOP: the certifying arm of Demeter, the international agency certifying biodynamically grown crops.
VOF: Vermont Organic Farmer
WA: Washington State Department of Agriculture

Prices and **Seed Counts** - See page 14 and following.

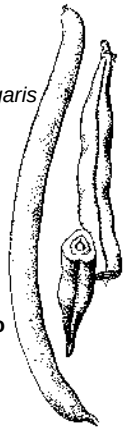
CERTIFIED-ORGANIC VARIETIES

All open-pollinated unless otherwise noted. See main body of catalog, beginning on page 14, for descriptions, available sizes and prices for all our varieties and for section headers containing cultural information and sundry facts. For organic cover crops, see pp. 120–123.

STORE RACKS

103 and **104** See p. 14.

BEANS *Phaseolus vulgaris*



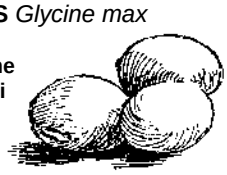
205PO Provider
225BO Royal Burgundy
247MO Montpellier
249MO Maxibel
262GO Golden Rocky
265NO Indy Gold
277DO Dragon Langerie

Dry Beans

307KO Black Kabouli Garbanzo
331CO Silver Cloud Cannellini
335TO Tiger Eye
337RO Ireland Creek Annie
340HO Hutterite
344JO Jacob's Cattle
366PO Agate Pinto
371CO True Red Cranberry Pole

SOYBEANS *Glycine max*

489FO Shirofumi
492SO Sayamusume
493MO Giant Midori



CERTIFIED-ORGANIC VARIETIES

CORN *Zea mays*

Sweet Corn

516AO Ashworth
588LO Luscious
616HO Painted Hills
622PO SugarPearl

Popcorn

675DO Dakota Black
677BO Pennsylvania Dutch Butter Flavored

Ornamental & Dry Field Corn

680PO Painted Mountain
682CO Abenaki Calais Flint
688FO Floriani Red Flint

PEAS *Pisum sativum*

739PO Patriot
761GO Green Arrow
788MO Mayfair
819GO Oregon Giant Snow Pea
822BO Blizzard Snow Pea
833MO Sumo Snow Pea
883GO Sugar Ann Snap Pea
889CO Cascadia
893SO Sugarsnap
896OO Opal Creek Snap Pea

MUSKMELON and CANTALOUPE *Cucumis melo*

908JO Jenny Lind
925GO Golden Gopher
930PO Petit Gris de Rennes
943FO Prescott Fond Blanc
1059AO Arava Cantaloupe

WATERMELON *Citrullus lanatus*

954BO Blacktail Mountain
957MO Early Moonbeam
963SO Sugar Baby
974DO Sweet Dakota Rose
989CO Crimson Sweet
991OO Orangeglo
992MO Moon and Stars

CUCUMBERS *Cucumis sativus*

Pickler

1239LO Little Leaf H-19

Slicers

1308PO Poona Kheera
1311BO Boothby's Blonde
1313MO Marketmore 76
1318SO Silver Slicer
1375RO Richmond Green Apple
1394SO Suhyo Long
1396KO Shintokiwa

SUMMER SQUASH *Cucurbita pepo*

1457CO Costata Romanesca
1520LO Lemon Squash
1539CO Early Summer Yellow Crookneck
1577YO Y-Star

WINTER SQUASH *Cucurbita* spp.

1609SO Sweet Reba
1610PO Paydon
1611ZO Zeppelin Delicata
1615SO Squisito
1617GO Guatemalan Blue
1630DO Uncle David's Dakota Dessert
1672GO Galeux d'Eysines
1683BO Burpee's Butterbush
1686PO Ponca
1688WO Waltham Butternut
1693SO Seminole

PUMPKINS *Cucurbita pepo*

1718WO Winter Luxury
1720NO New England Pie
1723LO Long Pie
1729YO Young's Beauty
1752HO Howden

GOURDS *Cucurbita pepo* var. *ovifera*

1909TO Tennesee Dancing Gourd

CARROTS *Daucus carota*

2060RO Rumba
2068AO Atomic Red
2076DO Danvers 126
2079KO Scarlet Keeper
2093YO Yaya

BEETS *Beta vulgaris*

2109WO Early Wonder Tall Top
2121RO Red Ace
2128GO 3 Root Grex
2137CO Chioggia Guardsmark
2144GO Golden Detroit
2149TO Touchstone
2187BO Bull's Blood

RADISHES *Raphanus sativus*

2268MO Misato Rose

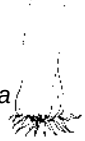
PARSNIPS *Pastinaca sativa*

2306DO Andover

TURNIP *Brassica rapa*

2379WO Purple Top White Globe

LEEKS & ONIONS *Allium* spp.



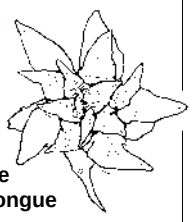
2407RO King Richard Leek
2411SO King Sieg Leek
2449YO New York Early Onion
2474DO Clear Dawn Onion
2489DO Dakota Tears Onion

SPINACH *Spinacea oleracea*

2541BO Bloomsdale
2558WO Winter Bloomsdale

LETTUCE *Lactuca sativa*

Looseleaf and Oakleaf



2712BO Black Seeded Simpson
2713GO Green Ice
2719BO Bronze Arrowhead
2723SO Salad Bowl
2729RO Red Salad Bowl
2731CO Cracoviensis
2732GO Strela Green
2738AO Antares
2740DO Green Deer Tongue
2744RO Really Red Deer Tongue
2761RO Red Sails
2764BO Blushed Butter Oaks
2766YO Australian Yellow
2768CO Lingua di Canarino
2771YO Royal Oakleaf
2773HO Hyper Red Rumple Waved
2775FO New Red Fire
2781XO Merlox Red Oak
2784FO Flashy Green Butter Oak
2785TO Italienischer
2786WO Red Tinged Winter/BD
2787BO De Morges Braun
2788OO Oscarde
2789MO Merlot
2791TO Tango
2793LO Dark Lollo Rossa
2795VO Lollo di Vino

Bibb and Butterhead

2814NO North Pole/BD
2816MO Winter Marvel
2828PO Pirat
2831SO Speckled
2834VO Sweet Valentine
2836YO Red-Eared Butterheart
2841NO Nancy

Romaine, Cos, Batavian, Crisphead

2852PO Pandero
2854BO Blushed Butter Cos
2856JO Mayan Jaguar
2858FO Forellenschluss
2861JO Jericho
2866PO Plato II
2874LO Olga
2883CO Crisp Mint
2886WO Winter Wonderland
2905DO Cardinale
2907SO Sierra
2908TO Concept
2921NO Anuenue

Mixes

2981LO Lettuce Mix
2983DO DeLuxe Lettuce Mix
2984FO Freedom Mix
2985RO Red Carpet Mix
2993GO Greens Mix

GREENS

3023AO Arugula
3038GO Golden Chard
3041RO Rhubarb Chard
3045CO Chervil
3056WO Wrinkled Crinkled Crumpled Cress
3063FO Très Fine Maraîchère Olesh Endive
6011CO Speckled Friz Chickendive
3148RO Red Orach
3150AO Aurora Orach
3170DO Dark Green Italian Parsley
3182GO Golden Purslane

ASIAN GREENS *Brassica* spp.

3221TO Tatsoi
3228MO Early Mizuna
3229RO Ruby Streaks
3230MO Mizspoona Salad Selects GP
3234LO Pink Lettucy Mustard Gene Pool
3236RO Red Giant Mustard
3239PO Osaka Purple Mustard
3246PO Purple Rapa Mustard Gene Pool
3253ZO Torziroh
3270PO Prize Choy Pac Choi

BROCCOLI *B. oleracea*

3306SO Solstice
3312FO Fiesta
3316PO Purple Peacock
3318TO Thompson

KALE *Brassica* spp.

3450BO Beedy's Camden
3457LO Rainbow Lacinato
3462RO Red Russian
3464WO White Russian

Giving Thanks/ Grazie
Come the harvest,
leave three fruit:
one for the soil,
one for the sun,
one for the plant
that worked so hard.

CERTIFIED-ORGANIC VARIETIES

GLOBE ARTICHOKE
Cynara scolymus
3608SO Imperial Star

CELERY *Apium graveolens*
3621PO Par-Cel Cutting Celery
3624VO Ventura
3630RO Redventure
3634TO Tango

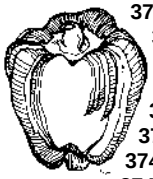
EGGPLANT *Solanum melongena*
3678AO Applegreen
3684DO Diamond
3688RO Rosita
3691BO Rosa Bianca

OKRA *Abelmoschus esculentus*
3695JO Cajun Jewel
3697GO Red Burgundy
3699BO Beck's Big Buck

PEPPERS *Capsicum annuum*

O.P. Sweet Peppers

3703KO Klari Baby Cheese
3704PO Peacework



3706NO King of the North
3715BO Boldog
3723PO Purple Beauty
3731JO Jimmy Nardello's
3735CO Chocolate
3744TO Tangerine Pimiento
3746FO Feherozon

O.P. Hot Peppers

3751PO Hot Portugal
3753BO Czech Black
3773MO Matchbox
3781FO Fish
3783TO Thai Hot
3794HO Hinkelhatz
3795DO Hidalgo

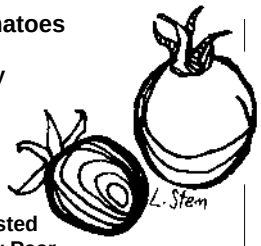
Hybrid Sweet Pepper
3826GO Gilboa
3836CO Carmen

PHYSALIS *P. ixocarpa*
4015VO Verde Puebla Tomatillo

TOMATOES *Lycopersicon esculentum*
4018LO Glacier
4025SO Oregon Spring
4032GO Ida Gold
4038CO Cosmonaut Volkov
4045PO Garden Peach

4049RO Pruden's Purple
4053PO Black Prince
4054GO Goldie
4055TO Rutgers
4056GO Green Zebra
4059CO Cherokee Purple
4060BO Paul Robeson
4061KO Black Krim
4065JO Jubilee
4067RO Rose de Berne
4069GO German Johnson
4071SO Soldacki
4075BO Pink Brandywine
4076YO Yellow Brandywine
4077NO Pineapple
4080AO Aunt Ruby's German Green
4083WO Weisnicht's Ukrainian
4087TO Tiffen Mennonite
4091LO Lillian's Yellow Heirloom
4097RO Ruby Gold
4238LO Luci 2103

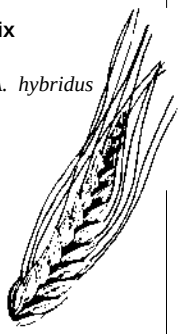
Cherry Tomatoes



4108BO Be My Baby
4115BO Black Cherry
4117PO Principe Borghese
4118YO Egg Yolk
4119VO Peacevine
4121DO Green Doctors Frosted
4122FO Fargo Yellow Pear

Paste Tomatoes
4123MO Mr. Fumarole
4125HO Heinz 2653
4131GO Grandma Mary's
4133LO Bellstar
4135PO Opalka
4137NO Orange Banana
4138RO Speckled Roman
4140AO Amish Paste
4141HO Hog Heart
4146BO Blue Beech
4149MO Heirloom Tomato Mix

GRAINS



4300OO Opopeo Amaranth *A. hybridus*
4309TO Terra Hulless Oats *Avena nuda*
4312RO Duborskian Rice *Oryza sativa*
4322BO Black Eagle Wheat *Triticum aestivum*
4324UO Utrecht Blue Wheat *Triticum durum*

HERBS
4407AO Anise Hyssop *Agastache fæniculum*
4409RO Arnica Chamissonis *A. c.*
4411WO Ashwagandha *Withania somnifera*

Basil *Ocimum basilicum*

4415WO Sweet
4441RO Aromato
4448LO Lemon *O. b. citriodorum*
4453LO Lime
4467BO Sacred *O. sanctum*
4481WO Wild Bergamot *Monarda fistulosa*
4484HO Blessed Thistle *Cnicus benedictus*
4491BO Borage *Borago officinalis*
4512CO Chives *Allium schoenoprasum*
4517RO Caribe Cilantro *Coriandrum sativum*
4531BO Bouquet Dill *Anethum graveolens*
4547CO Echinacea *E. purpurea*

Fennel
Foeniculum vulgare

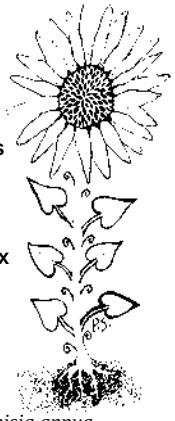
4553PO Perfection
4567BO Bronze
4572FO Feverfew *Tanacetum parthenium*
4630TO Milk Thistle *Silybum marianum*
4640MO Motherwort *Leonurus cardiaca*
4649ZO Zaatar Oregano *Origanum syriacum*
4683SO Spilanthes *S. oleracea*
4692BO Blue Vervain *Verbena hastata*

FLOWERS
4835HO Hopi Red Dye Amaranth *A. cruentus*
4837EO Elephant Head Amaranth *A. gangeticus*

Calendula *C. officinalis*
4911FO Flashback
4913KO Kablouna Mix
4916MO Maya Orange
4925RO Resina
4927LO Solar Flashback
4929ZO Zeolights

5147JO Job's Tears *Coix lacryma-jobi*
5277KO Kniola's Purple Morning Glory *Ipomoea purpurea*
5289JO Jewel Mix Nasturtium *Tropaeolum majus*

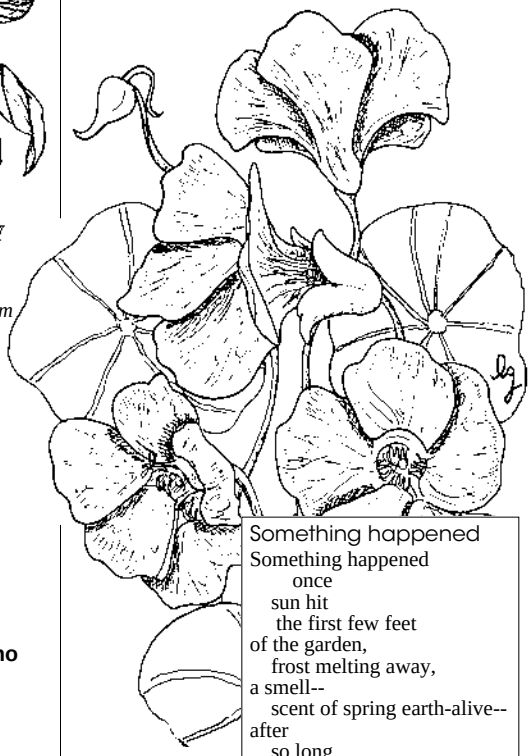
Poppy *Papaver* spp.
5350EO Elka
5351ZO Ziar Breadseed
5366QO Drama Queen
5368FO Flemish
5371RO Fluffy Ruffles
5377LO Large Lavender
5378SO Scarlet Peony



5423SO Northern Sea Oats *Chasmanthium latifolium*

Sunflower *Helianthus annuus*
5500AO Autumn Beauty Mix
5515LO Lemon Queen
5539SO Selma Suns
5542SO Soraya
5551TO Tiger's Eye
5906HO Hopi Dye

5603AO Sweet Annie *Artemisia annua*



Something happened
Something happened
once
sun hit
the first few feet
of the garden,
frost melting away,
a smell--
scent of spring earth-alive--
after
so long
quiet snow.

Variety Descriptions by CR Lawn

- Seek selections suitable for your use: home consumption, market or CSA.
- Be observant and aware: farming and gardening are more art than science.
- Microclimate, soil type and cultural practices greatly affect performance.
- Marketers: trial new varieties on a small scale before fully committing.

Disease Tolerance & Resistance - As a guide to growers we include information provided by our suppliers. These are not guarantees.

- Even tolerant or resistant cultivars may be harmed in unusual conditions.
- Actual field performance depends on climate, weather and cultural practices which we cannot control.
- Many older cultivars, though unrated for disease tolerance/resistance, have proven adapted to a variety of conditions.

Following are abbreviations that appear after some variety descriptions. A number after the abbreviation indicates which race of pathogen:

ALTS	Alternaria Leaf Spot	N	Nematodes
ANTH	Anthracnose	NCLB	Northern Corn Leaf Blight
ASC	Alternaria Stem Canker	NY 15	NY 15 Mosaic Virus
BLS	Bacterial Leaf Spot	P	Pythium
BR	Black Rot	PEMV	Pea Enation Mosaic Virus
BS	Bacterial Speck	PLR	Pea Leaf Roll
BSR	Bacterial Soft Rot	PM	Powdery Mildew
BW	Bacterial Wilt	PR	Pink Rot
CBMV	Common Bean Mosaic Virus	PRSV	Papaya Ring Spot Virus
CLS	Cercospora Leaf Spot	R	Rust
CMV	Cucumber Mosaic Virus	SC	Sclerotinia
CTV	Curly Top Virus	SCLB	Southern Corn Leaf Blight
DM	Downy Mildew	SEPT	Septoria Leaf Spot
EB	Early Blight	ST	Stewart's Wilt
F	Fusarium	TB	Tipburn
FY	Fusarium Yellows	TMV	Tobacco Mosaic Virus
GLS	Grey Leaf Spot	V	Verticillium
HB	Halo Blight	W	Common Wilt race 1
LB	Late Blight	WMV	Watermelon Mosaic Virus
LMV	Lettuce Mosaic Virus	X	Xanthemonas
LS	Leaf Spot	ZYMV	Zucchini Yellows Mosaic Virus
MDMV	Maize Dwarf Mosaic Virus		

OG after cultivar name = entire lot is certified-organic seed. See page 11 for a key to abbreviations of certifying agencies and for more information about the OG and ECO designations.

ECO after cultivar name = entire lot is sustainably grown seed.

BD after cultivar name = entire lot is biodynamically grown seed.

PVP = Plant Variety Protected. Unauthorized propagation of the seed is prohibited. The use of PVP in the catalog is for informational purposes only and in no way constitutes an endorsement by Fedco of plant patenting.

AAS = All-America Selection.

❄ indicates cold-hardy through at least part of the Maine winter. See list on page 55 for more information.

☙ = a variety introduced by Fedco followed by the year first offered.

Supplier Codes - We include supplier codes for each variety. Varieties with more than one supplier may have two or more codes. We code according to our best information at press time. When seed is short we must sometimes change suppliers later in the season. With notable exceptions, we generally choose varieties based on their merits rather than on our supplier preferences. We do not offer genetically engineered varieties, although we purchase from corporations engaged in genetic engineering. Use the supplier codes to help you make your own choices about whom you are supporting and which varieties are best for your garden or farm. Codes are as follows:

① Small seed farmers including Fedco staff.
② Family-owned companies or cooperatives, domestic and foreign.
③ Domestic and foreign corporations not part of a larger conglomerate.
④ Multinationals not to our knowledge engaged in genetic engineering.
⑤ Multinationals who are engaged in genetic engineering.

"Love your catalog. Wish you would make supplier codes more front and center so we are all more aware of where seeds come from."
–Christine Hughes, Ravena, NY

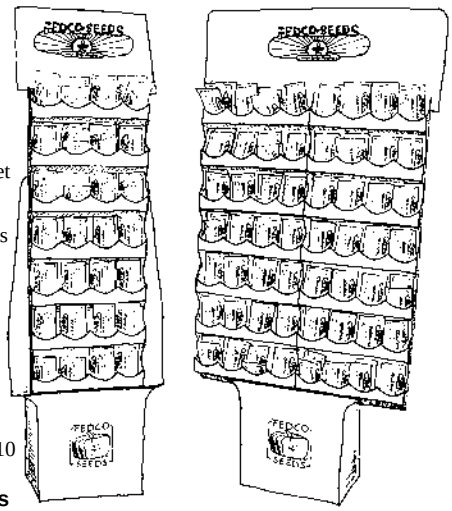
Heldover Seed - Like most other seed merchants, we carry over stock from one year to the next, in any given season between 10–30% of offerings. We test all such lots for viability and discard any in doubt. Last year we identified some varieties where all seed was held over and provided germ-test results for them. This year's listings are more comprehensive. We think you should know as much as possible about our seed. Heldover seed is not necessarily inferior to fresh seed; we have confidence in all lots we offer. We commission two-year productions of some varieties to decrease our growers' costs, increase their efficiencies and improve their isolations.

Prices - Sizes and prices are at the end of each variety description. For larger quantities than listed see instructions for bulk orders of seed on p. 3.

Seed Counts - For general information for each crop see the Vegetable Planting Guide on page 81 or the headers for most vegetables.

Optimal Germination Guide - Sowing seeds at sub-optimal temperatures is the most common cause of failure. We include information in some headers about ideal germination temperatures, taken and extrapolated from tables in *Knott's Handbook for Vegetable Growers* ISBN 0-471-73828X and *The New Seed-Starters Handbook* by Nancy Bubel, ISBN 0-87857-752-1.

Fedco's Packet Rack Program for Retailers



Portable cardboard packet racks suitable for all our A-size packets. The top slots hold about 4 packets of peas, beans or corn; all slots hold at least 10 packets of the other crops. Dimensions for the 28-slot rack are 14" deep, 20" wide, 62" high. For the 56-slot rack 14x30x64". Each collection has 28 or 56 varieties and either 5 or 10 packets of each variety.

101 Popular Favorites
28 best-selling varieties. 20 vegetables, 4 herbs, 4 flowers, 6 organic.
A=5 packets of each with rack, $177.90
B=10 packets of each with rack, $330.80
C=5 packets of each without rack, $152.90
D=10 packets of each without rack, $305.80

102 Popular Favorites 56 best-selling varieties. 42 vegetables, 7 herbs, 7 flowers, 14 organic.
A=5 packets of each with rack, $380.80
B=10 packets of each with rack, $736.50
C=5 packets of each without rack, $355.80
D=10 packets of each without rack, $711.50

103 All Certified Organic 28 best-selling organic varieties. 23 vegetables, 2 herbs, 3 flowers.
A=5 packets of each with rack, $221.60
B=10 packets of each with rack, $418.20
C=5 packets of each without rack, $196.50
D=10 packets of each without rack, $393.20

104 All Certified Organic 56 best-selling organic varieties. 41 vegetables, 7 herbs, 8 flowers.
A=5 packets of each with rack, $425.40
B=10 packets of each with rack, $825.80
C=5 packets of each without rack, $400.40
D=10 packets of each without rack, $800.80

105 Heirloom Collection 28 heirloom varieties. 24 vegetables, 1 herb, 3 flowers, 12 organic.
A=5 packets of each with rack, $193.60
B=10 packets of each with rack, $362.20
C=5 packets of each without rack, $168.60
D=10 packets of each without rack, $337.20

106 Heirloom Collection 56 heirloom varieties. 44 vegetables, 4 herbs, 8 flowers, 23 organic.
A=5 packets of each with rack, $367.00
B=10 packets of each with rack, $709.00
C=5 packets of each without rack, $342.00
D=10 packets of each without rack, $684.00

Ground rules:

- **Collections qualify for all regular volume discounts**, as do re-orders of $50 and over.
- Collections may be combined with individual packet orders to reach higher discount levels.
- Packets are our regular design. We will furnish samples on request.
- Pre-order, prepay.
- Free shipping on all orders.
- All re-orders will be advanced to the front of the line for fast service.
- No returns.
- Varieties our choice; no substitutions.
- We will make substitutions if we run out of any items in the collections.
- Reorder requests will be honored until June 1.
- Retailers remove packets from racks by July 31; don't sell stale seed.
- No suggested retail. Determine the profit margin you need.
- Questions? email **seedquality@fedcoseeds.com**.

For a list of specific items in each collection, download from our website at www.fedcoseeds.com or write or call for a paper copy.

Seed Envelopes Our reclosable seed envelopes, plain white with no logo. Use them for seed saving, repacking bulk seed, or tucking away small objects. Two sizes. All volume discounts apply.

111SD Seed Envelopes 3¼ x 4¾"
A=bundle of 10, $2.25 **B**=bundle of 50, $6.00 **C**=bundle of 100, $9.00

112SE Seed Envelopes 3⅝"x 5½"
A=bundle of 10, $2.50 **B**=bundle of 50, $7.00 **C**=bundle of 100, $11.00

BEANS *Phaseolus vulgaris*

2 oz packet sows 25 ft; 1 lb, 200 ft. Avg 180 seeds/2 oz packet. All beans are open-pollinated. Tender, will not survive frost. Plant 3–4 seeds/ft. in rows 24–30" apart. Pick frequently to keep beans producing, but stay out of the patch in wet weather to prevent spread of fungal diseases. White-seeded beans usually don't germinate as well as dark-seeded. Minimum germination soil temperature 60˚. Optimal range 60–80˚. Optimal temperature 77˚. Emergence takes 16 days at 59˚; only 8 days at 77˚. Produce 97% normal seedlings at 77˚, but only 47% at 86˚.

Note: In conditions of high nitrogen fertility some bush beans may develop vines in moist hot weather.

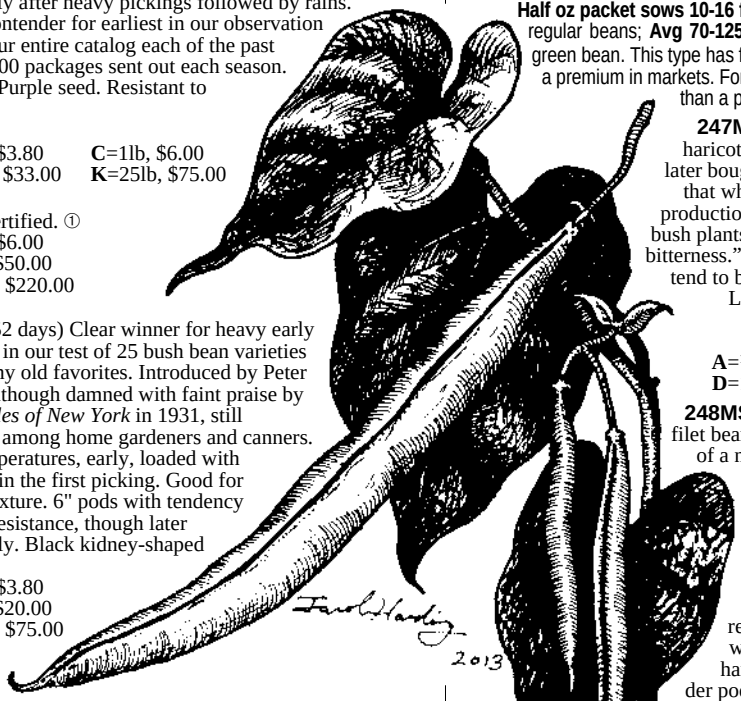
BUSH GREEN BEANS

Provider (50 days) Nothing provides like Provider. For highest early yields—even under adverse conditions—and rich beany taste, old reliable Provider can't be beat. Also excellent for canning and "my choice for freezing and dilly beans," says Elaine Carlson of Cape Porpoise, ME. Noted for its concentrated sets of round 5–5½" pods. Anne Elder of Community Farm of Ann Arbor praises its amazing resilience: it and #**225** Royal Burgundy re-flower repeatedly after heavy pickings followed by rains. Came in one day ahead of Contender for earliest in our observation plot. Best-selling variety in our entire catalog each of the past two years with more than 7,000 packages sent out each season. Released by USDA in 1965. Purple seed. Resistant to CBMV, NY 15, PM, DM.

204PR Provider ③
A=2oz, $1.40 **B**=8oz, $3.80 **C**=1lb, $6.00 **D**=5lb, $20.00 **E**=10lb, $33.00 **K**=25lb, $75.00 **L**=50lb, $140.00

205PO Provider OG ID-certified. ①
A=2oz, $2.10 **B**=8oz, $6.00 **C**=1lb, $11.00 **D**=5lb, $50.00 **E**=10lb, $95.00 **K**=25lb, $220.00 **L**=50lb, $420.00

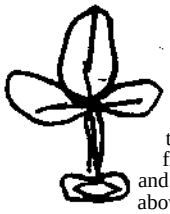
208BV Black Valentine (52 days) Clear winner for heavy early yields and outstanding flavor in our test of 25 bush bean varieties some years back, besting many old favorites. Introduced by Peter Henderson & Co. in 1897. Although damned with faint praise by U.P. Hedrick in *The Vegetables of New York* in 1931, still deservedly retains popularity among home gardeners and canners. Well adapted to our cool temperatures, early, loaded with sweet succulent round beans in the first picking. Good for freezing, retaining a meaty texture. 6" pods with tendency to curve. Has some drought resistance, though later pickings yield only moderately. Black kidney-shaped seed. ③
A=2oz, $1.40 **B**=8oz, $3.80 **C**=1lb, $6.00 **D**=5lb, $20.00 **E**=10lb, $33.00 **K**=25lb, $75.00 **L**=50lb, $140.00



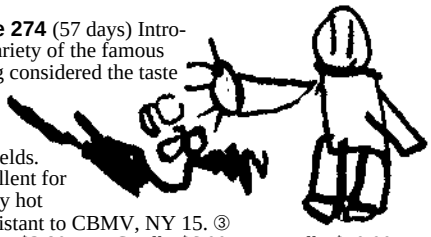
210ST Strike (53 days) Market growers will strike it rich with heavy yields of medium-green 5½" slender smooth straight round pods. Strike sets the standard for earliness, appearance and ease of picking, and has a pleasing sweet beany taste. White seed. Resistant to NY 15 and CBMV. ③
A=2oz, $1.40 **B**=8oz, $3.80 **C**=1lb, $6.00 **D**=5lb, $20.00 **E**=10lb, $33.00 **K**=25lb, $75.00 **L**=50lb, $140.00

214GC Greencrop (53 days) An early flat-podded Romano type especially adapted to the North. Pods can grow up to 8" long while still retaining good quality. Bred by Albert F. Yaeger and Elwyn Meader at the University of New Hampshire. 1957 AAS. White seed. Tolerant to CBMV. ③
A=2oz, $1.40 **B**=8oz, $3.80 **C**=1lb, $6.00 **D**=5lb, $20.00 **E**=10lb, $33.00 **K**=25lb, $75.00 **L**=50lb, $140.00

225BO Royal Burgundy OG (55 days) Straight 5" meaty purple pods turn bright green after two minutes of blanching. Less foliage than Royalty Purple Pod. Grows well even in cold conditions. Light brown seed. Resistant to CBMV, NY 15, PM. ID-certified. ①
A=2oz, $2.10 **B**=8oz, $6.00 **C**=1lb, $11.00 **D**=5lb, $50.00 **E**=10lb, $95.00 **K**=25lb, $220.00 **L**=50lb, $420.00



230JD Jade (56 days) We have found a supplier for the original Jade, which we greatly preferred to the newer Jade II in our trials. Favored by both market and home gardeners, producing great yields of tasty 5–7" straight slender round dark green beans that keep coming until late in the season, long after others have quit. Known for their holding quality, the tender pods with traditional bean flavor retain rich color longer than others, both on the vine and after picking. Jade's strong upright bush habit holds pods above the ground, reducing curling and tip rot. "This has been my only green bean for many years. It reliably comes back with a second flush and will make beans until the frost gets it," testifies Beth Stinchfield of Bernardston, MA. PVP. Resistant to CBMV, NY15, CTV, tolerant to R. *Caution: white-seeded Jade is a fussy germinator. Be sure your soil temperature is at least 60 °and irrigate during dry spells.* ⑤
A=2oz, $2.30 **B**=8oz, $5.60 **C**=1lb, $10.00 **D**=5lb, $45.00 **E**=10lb, $90.00 **K**=25lb, $210.00 **L**=50lb, $400.00



238BB Bush Blue Lake 274 (57 days) Introduced in 1961 as a bush variety of the famous Blue Lake pole bean. Long considered the taste standard for home-garden bush beans. Pods average 6", fill slowly with tender plump beans. Very high yields. Not heat tolerant, but excellent for fall crops in areas with very hot summers. White seed. Resistant to CBMV, NY 15. ③
A=2oz, $1.40 **B**=8oz, $3.80 **C**=1lb, $6.00 **D**=5lb, $20.00 **E**=10lb, $33.00 **K**=25lb, $75.00 **L**=50lb, $140.00

246RM Roma II (59 days) True flat bush Romano offers heavy yields of fleshy medium-green 5" pods that are slow to develop seeds. White seed. A small percentage will develop runners. Resistant to CBMV, NY15. ⑤
A=2oz, $1.80 **B**=8oz, $5.20 **C**=1lb, $9.00 **D**=5lb, $40.00 **E**=10lb, $70.00 **K**=25lb, $160.00 **L**=50lb, $300.00

BUSH HARICOTS VERTS

Half oz packet sows 10-16 ft; 1 lb, 320-500 ft. Seeds are smaller than those of regular beans; **Avg 70-125 seeds/half oz packet.** *Haricot vert* is French for green bean. This type has fancier quality than American beans and commands a premium in markets. For optimal flavor, pick pods when they are still thinner than a pencil, before they develop strings.

247MO Montpellier OG (57 days) A very refined haricot vert for home gardens developed by Petoseed, later bought by Seminis/Monsanto. We liked it so much that when they dropped it, we commissioned our own production. Bears straight dark green 6" pods on upright bush plants. Our trialer said, "excellent raw with minimal bitterness." Exquisitely tender with a delicate flavor. Pods tend to be almost camouflaged and can be hard to pick. Long in our pipeline and well worth waiting for. Small white seed. Resists CBMV and ANTH. MOFGA-certified. ① **NEW!**
A=½oz, $1.50 **B**=2oz, $3.20 **C**=8oz, $7.60 **D**=1lb, $12.00 **E**=5lb, $50.00

248MS Masai (58 days) Love the quality of French filet beans, but hate to have to pick them so often? One of a new class of haricot verts that holds a long time without fattening, Masai may be for you. Elaine Carlson calls them "one of the wonders of the world—I cannot believe how long these green crunchy slivers stand on the little plants." But market grower Holli Cederholm found she had to pick them like other beans, every other day to achieve the tender gourmet restaurant quality her markets demanded. Otherwise the pods got tough, she said. Unlike classic haricot verts, Masai grows only 5" long, the slender pods juicy and crisp with a pleasing beany flavor. Although much more compact than Provider, each plant cranks out dozens of the diminutive beans. A space saver since only a few plants will suffice for a small family. A favorite of Fedco customers, especially home gardeners who purchased most of the 2,840 packets we sold last year. ~170 seeds/oz ⑤
A=½oz, $1.60 **B**=2oz, $4.00 **C**=8oz, $11.00 **D**=1lb, $20.00 **E**=5lb, $80.00

249MO Maxibel OG (61 days) A heavy producer of uniform dark green fancy 6–8" pods of exceptional length, ramrod straightness and superb taste. For maximum tenderness and most succulent flavor pick early and often. Normal-sized bushes are not as compact as Masai. A gourmet market specialty. Speckled brown seed. White flowers. ID-certified. ~140 seeds/oz.①
A=½oz, $1.40 **B**=2oz, $3.00 **C**=8oz, $7.50 **D**=1lb, $14.00 **E**=5lb, $60.00 **K**=10lb, $110.00

251CC Concador Yellow (62 days) Now you can pick your own basin of gold. Concador, the yellow-bean lover's answer to #**248** Masai, fills the need for multiple colors in this fast-growing niche. Like Masai, the uniform 4½–5" pods stay slender for a long time on the vine and will keep producing copiously if tended. Medium-sized upright plants larger than Masai. Resistant to CBMV, ANTH and HB. ~250 seeds/oz. ③
A=½oz, $2.20 **B**=1oz, $4.20 **C**=4oz, $15.00

254VL Velour (62 days) Velvety? That may be stretching it to describe the texture of a bean, even one as elegant as Velour. However Velour is undeniably striking and offers a great opportunity to add the color purple to your filet bean repertoire. Built very much along the lines of Masai and Concador, Velour delivers ample harvests of slender straight bright 4–5" purple pods that turn green when blanched. Upright medium-sized plants. Resistant to CBMV and HB. ~190 seeds/oz. ⑤
A=½oz, $2.20 **B**=2oz, $4.20 **C**=8oz, $14.00

BUSH WAX BEANS

Wax beans were developed in the 1830s.

262GO Golden Rocky OG (54 days) Heirloom from France, also known as *Beurre de Rocquencourt*, noteworthy for its slender juicy pods that melt in your mouth, light and not beany. Germinates well in cool wet conditions and retains vigor even under night temperatures in the 40s and 50s. Stands out as a vigorous and consistent cropper when many others falter in excessive rainfall and insufficient heat. "Golden Rocky beans were very prolific with a fine delicate taste," reported Joan Gibson of Milky Way Organic Farm in Levant, ME. ID-certified. ①

A=2oz, $2.00 **B**=8oz, $6.00 **C**=1lb, $11.00 **D**=5lb, $50.00
E=10lb, $95.00 **K**=25lb, $220.00 **L**=50lb, $420.00

265NO Indy Gold OG (54 days) Tender yellow pods with attractive green tips average 5". Heavy-yielding large plants not slowed by any caution flags. A good performer even in cold wet summers with adaptability comparable to Provider. Beans, held high off the ground, are easy to pick and hold well. Also makes a delicious shell bean. White-seeded. Tolerates CBMV. Seed germinates at 87%. *This is our final year to offer.* PVP. ID-certified. ①

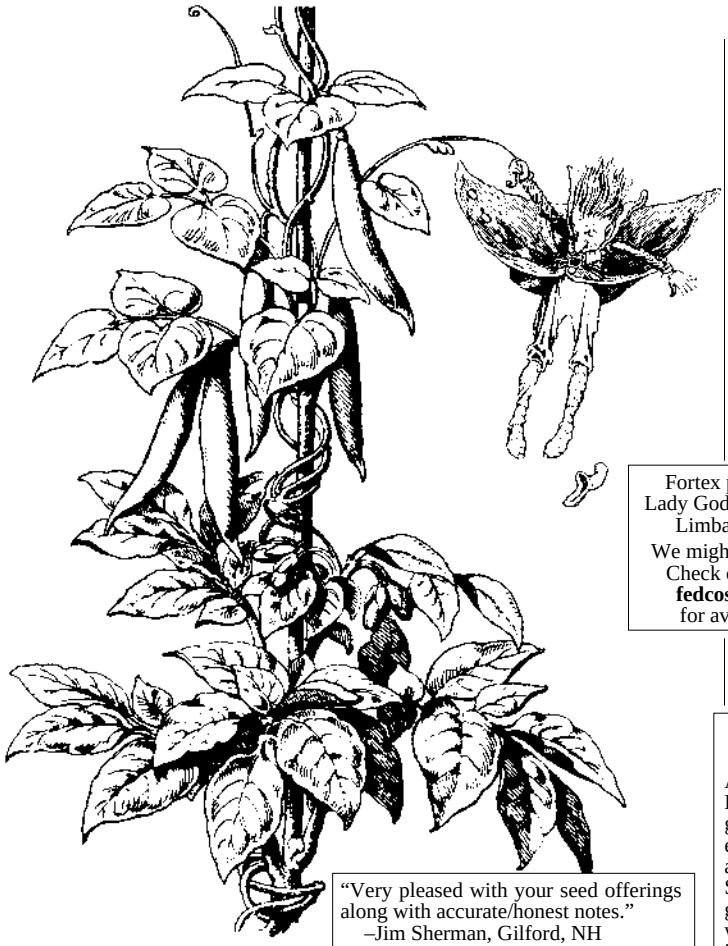
A=2oz, $1.80 **B**=8oz, $4.50 **C**=1lb, $8.00 **D**=5lb, $36.00
E=10lb, $70.00 **K**=25lb, $150.00 **L**=50lb, $280.00

270GB Golden Butterwax (56 days) A white-seeded wax bean impressive for its rich yellow color and straight pods. We rate Butterwax as less juicy than Golden Rocky or Rocdor, but beanier. Resistant to CBMV, NY15, tolerant to ozone damage. ③

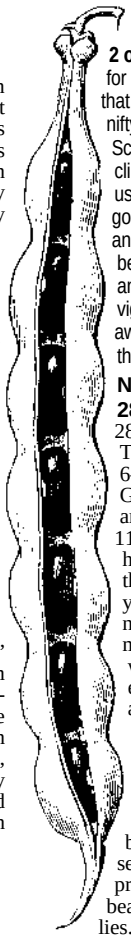
A=2oz, $1.40 **B**=8oz, $3.80 **C**=1lb, $6.00 **D**=5lb, $20.00
E=10lb, $33.00 **K**=25lb, $75.00 **L**=50lb, $140.00

277DO Dragon Langerie OG (57 days) Also known as Dragon's Tongue. "Dragon beans are probably my customers' favorites at market!" reports Megan Rulli of Gardners, PA. Tasty attractive 19th-century heirloom hails from the Netherlands. Its compact stocky bushes bear abundant purple-violet flowers followed by flat 6" creamy yellow pods mottled with purple tiger stripes. Sunlight helps the colors become vivid, so plant farther apart in the row than normal bean spacing so interior set develops good color. Crisp, stringless and amazingly juicy when eaten fresh. Cook or market promptly after picking; turns rubbery and loses snap when stored. Not recommended for freezing. Loses purple coloration in cooking. Seed purplish brown with blue stripes. All our seed is held over. ID-certified. ID-certified. ①

A=2oz, $2.00 **B**=8oz, $5.50 **C**=1lb, $10.00 **D**=5lb, $48.00
E=10lb, $85.00 **K**=25lb, $200.00



"Very pleased with your seed offerings along with accurate/honest notes."
–Jim Sherman, Gilford, NH



POLE BEANS

2 oz packet sows 20 poles, 6 per pole. We've used four-legged tipis for staking for years. Gloria Seigars of New Sweden, ME, employs tall limber ash saplings that can be bent double without breaking. "Wired together, several of them make a nifty arbor and grand entrance to the vegetable garden." Pole beans and #**318** Scarlet Runner climb them with enthusiasm. Will Bonsall suggests letting them climb sunflower stalks (give the sunflowers a 2-week head start). Tom Stearns uses a long sturdy fence (the most space-efficient way). If you're saving seed, a good yield is 1 lb per pole. One customer says, "Many people—even gardeners and cooks—have no idea how much better tasting pole beans are. Most bush beans are cardboard by comparison." All pole beans have strings that won't be annoying if you pick early and often. Frequent clean picking will keep your vines vigorous and productive. Pick and compost those fat ones hanging low that got away; if you leave them on the vine your plants will stop producing, satisfied they've fulfilled their reproductive mission.

Northeaster (55 days) Crop failure. *Not available in 2014.*

281GG Golden Gate (59 days) The Golden Gate Bridge, opened May 28, 1937, spans three miles. The Golden Gate bean, debuting in the 2013 Territorial Seed catalog, spans ten inches with best eating quality at 6–8". The Golden Gate Bridge boasts 746' towers. The vigorous Golden Gate bean is capable of growing much taller than trialer Donna Dyrek and needs a high stout stake. The Golden Gate Bridge accommodates 110,000 vehicles per day. The Golden Gate bean will produce many handfuls of large flattened sunny yellow beans, but considerably fewer than 110,000. The Golden Gate Bridge takes in $100 million in tolls per year. If you bring the tender sweet and tasty Romano beans of that name to market, you will sell plenty of them, but well short of $100 million worth per season. Arguably the most magnificent bridge in the world, Golden Gate is also the most magnificent pole wax bean we've ever found in our trials. Good from here to 'Frisco, nutty, sweet, tender and crunchy with a buttery texture. Replaces Gold of Bacau. **NEW!** ②

A=½oz, $2.20 **B**=2oz, $5.00 **C**=8oz, $15.00 **D**=1lb, $25.00

Fortex OG (60 days) Consult our website **fedcoseeds.com** for availability, prices and description.

283GP German (64 days) Sam Birch, who grows hundreds of varieties each year, knows his beans and really likes this one. Not the black-seeded German bean listed in Seed Savers, instead, these white seeds originated with Sam's neighbor Phil Wentzel. Seeds, though surprisingly small, grow prolific wide flat long pods. Even at a foot long the beans remain tender. Enjoy as green beans or allow to mature into shellies. These vigorous climbers dwarf Sam by a full two feet. ☘2007 ①

A=½oz, $1.80 **B**=2oz, $4.20 **C**=8oz, $11.00 **D**=1lb, $20.00
E=5lb, $80.00 **K**=10lb, $150.00

Gold of Bacau OG (65 days) *Not available in 2014.* We recommend #**281** Golden Gate.

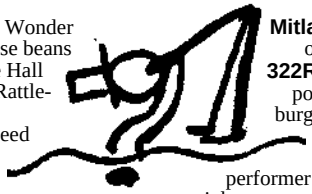
285KW Kentucky Wonder (68 days) Also known as Old Homestead. Back in 1921, Stark Bros. opined, "Of all the climbing kinds, we do not believe there is a better one than Kentucky Wonder; it is an old variety with solid meaty pods, 7–9" long…and when cooked no bean is better. It is enormously productive, the pods hanging in great clusters from top to bottom of the pole." The nutty flavor makes them outstanding for freezing. As the beans mature, the pods flatten. Pick regularly to maintain quality and production, as they get tough once the beans enlarge. A favorite since the mid-1800s, Wonder was given its present name by the eminent Marblehead, MA, seedsman James J.H. Gregory in 1877. Brown seeds. ③

A=2oz, $1.50 **B**=8oz, $4.20 **C**=1lb, $7.00 **D**=5lb, $22.00
E=10lb, $35.00 **K**=25lb, $80.00 **L**=50lb, $150.00

Fortex pole beans?
Lady Godiva pumpkin?
Limba broccoli?
We might have them.
Check our website
fedcoseeds.com
for availability.

Fedco Supports Sustainable Agriculture

At our 2013 Annual Meeting, our staff voted to allocate $17,000 to our Education Subsidy Fund for next year. We donate this money to individuals and groups working on projects that further goals of cooperation, preserve and extend our genetic diversity, and educate consumers, gardeners and farmers about the benefits of sustainable agriculture. We help underwrite the Scatterseed Project, NOFA's *Natural Farmer* newspaper, MOFGA's fairgrounds and education center, the annual MA, NH, NJ, NY and VT NOFA winter conferences, Maine Apple Day and other worthy endeavors. We invite individuals and groups with educational, cooperative or research projects to write for an application.



292RS Rattlesnake (70 days) "I've always been a Kentucky Wonder girl but got Rattlesnake for a substitute and am I ever glad. These beans are delicious fresh and frozen—beautiful, too," avers Catherine Hall of Ellsworth, ME. Called Preacher Bean in parts of the South, Rattlesnake produces a good harvest of round 6–7" pods with purple streakings said to resemble the markings of a rattlesnake. Tan seed with dark stripes. ③

A=2oz, $1.50 **B**=8oz, $4.20 **C**=1lb, $7.50
D=5lb, $22.00 **E**=10lb, $35.00 **K**=25lb, $80.00

295BC Blue Coco ECO (72 days snap) A pre-1775 French heirloom named for its chocolate seeds and bluish-purple pods, Coco makes a handsome plant, its green leaves tinged with purple. Can serve as a snap, shell or dry bean. Slightly curved pods with tender strings flatten as they age. Very mild and sweet with a pleasing meaty flavor and nutty aftertaste. Can be harvested at 3" as filet beans, remain tender to 5" without getting stringy. Pods turn green when blanched. Freezes well. Coco is supposedly tolerant of both heat and drought, but its production slacked off during hot dry weather, recovering upon the return of rain and more temperate nights. ①

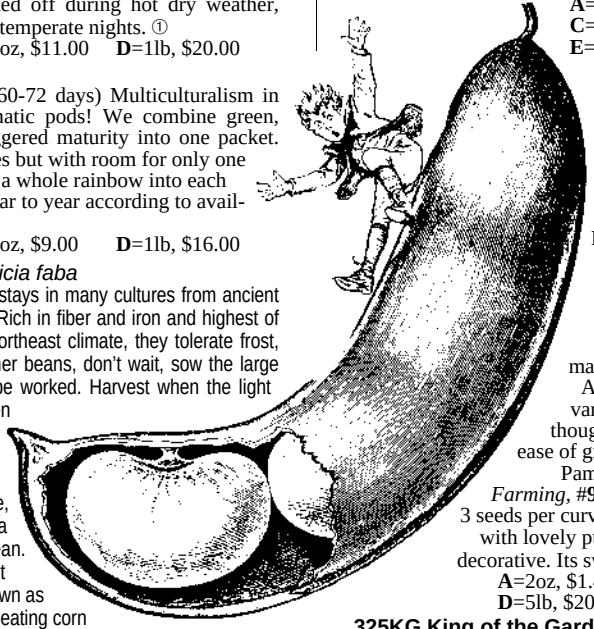
A=½oz, $1.80 **B**=2oz, $4.20 **C**=8oz, $11.00 **D**=1lb, $20.00
E=5lb, $80.00 **K**=10lb, $150.00

297MP Multicolored Pole Bean Mix (60-72 days) Multiculturalism in the bean patch. Pick a pole of polychromatic pods! We combine green, yellow, purple and striped varieties of staggered maturity into one packet. Great for those wishing to try all our varieties but with room for only one or two poles, and for CSAs who want to put a whole rainbow into each box. Varieties, our choice, will vary from year to year according to availability.

A=½oz, $1.60 **B**=2oz, $3.60 **C**=8oz, $9.00 **D**=1lb, $16.00

FAVA BEANS *Vicia faba*

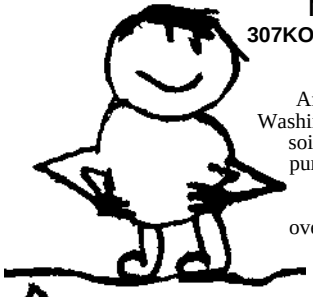
Also called broad beans and horse beans. Mainstays in many cultures from ancient Rome to modern-day Mexico, Brazil and India. Rich in fiber and iron and highest of all beans in protein. Well adapted to our cool northeast climate, they tolerate frost, but do not thrive in hot weather. Unlike with other beans, don't wait, sow the large seeds 3–4" apart as soon as the ground can be worked. Harvest when the light green beans in the 6" glossy pods reach the green shell stage. Melanie Edwards of Eastport, ME, advises "If you cook them fresh-picked they need to be parboiled only 1–2 minutes in lightly salted water. If they have been in the refrigerator a while, give them a minute more. Utterly delicious when a small bit of the cooking water is eaten with the bean. Gently break open the seed casing with your front teeth and squeeze out the inside. Shelling your own as you eat them is similar to the difference between eating corn on the cob and whole kernel corn. No comparison."



298WI Windsor (75 days) Bush type. The classic heirloom variety, listed by Fearing Burr in *Field and Vegetable Gardens of America* in 1863. We sell more than half a ton of these each year. Brown seed. ③

A=2oz, $1.50 **B**=8oz, $4.20 **C**=1lb, $7.00 **D**=5lb, $25.00
E=10lb, $40.00 **K**=25lb, $75.00 **L**=50lb, $145.00

Gigante OG (90 days) *Still not available in 2014.*



MISCELLANEOUS BEANS

307KO Black Kabouli Garbanzo OG (105 days) *Cicer arietinum* A cool-weather crop cultured like peas, garbanzos originated in Afghanistan. Black Kabouli was developed at Washington State University to be tolerant of cold soils and light frosts. 2' plants with ornamental purple flowers bear abundant two-seeded pods resembling beach peas with black medium-sized beans. All our seed is held over; germinates at 80%. OCIA-certified. ①

A=2oz, $1.80 **B**=8oz, $5.50
C=1lb, $9.50 **D**=5lb, $40.00
E=10lb, $70.00

318SR Scarlet Runner (70 days) *P. coccineus* Climbing beans often grown as ornamentals for their brilliant scarlet blossoms that attract hummingbirds. Need trellises, fences or poles; will grow to 10–12'. Can be eaten either as snap or shell (95 days) beans. Beautifully mottled purple and black seeds. Heirloom variety grown as early as 1750 by colonists and in 1791 by Thomas Jefferson. ③

A=1oz, $1.50 **B**=2oz, $2.40 **C**=8oz, $6.00 **D**=1lb, $10.00
E=5lb, $40.00

Mitla Black Tepary OG (85 days) *P. acutifolius* Still multiplying our stock seed; *not available in 2014.*

322RN Red Noodle Yard Long (90 days) *Vigna sesquipedalis* A pole or two of these, with their long pencil-thin 14–18" cascading burgundy pods makes a stunning garden entrance that draws people in and excites curious inquiries. Not the earliest of Yard Long beans, but surely the most spectacular. An indifferent performer in chilly Central Maine, Noodle preferred the warmer day and night temperatures of hill country Massachusetts and would do even better a zone or two south. Slow to produce, first ripening for me in MA Sept. 5, but once underway never looked back. Loves heat and moisture. Keep it picked to sustain production. This intriguing Asian specialty has found its cachet. Its strong unique indescribable flavor is brought out best by dry-frying in a hot wok with peanut oil, garlic and tamari. Stringless and most tender when young and thin. Must be trellised. All our seed is held over. About 200 seeds/oz. ③

A=½oz, $2.20 **B**=2oz, $8.00
C=4oz, $15.00 **D**=1lb, $50.00
E=5lb, $240.00

LIMA BEANS *Phaseolus lunatus*

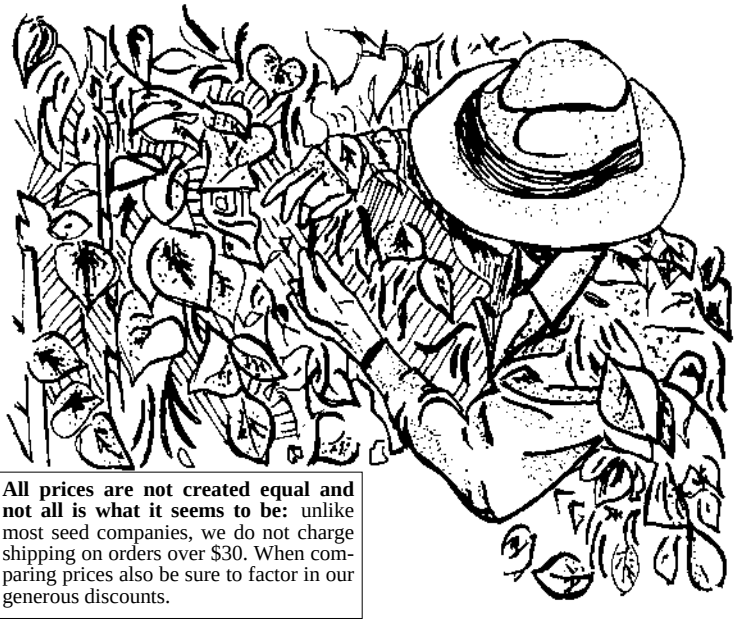
Originally from Peru where they were cultivated 6,000 years ago. Minimum soil temperature 60˚, optimal range 70-85˚, optimal temperature 85˚, emergence takes 18 days at 68˚, only 7 days at 77˚. 80% normal seedlings at 77˚, but 88% normal at 86˚.

323JW Jackson Wonder (103 days) U.P. Hedrick in 1931 called it "the hardiest of all bush limas, very productive." In his *100 Vegetables and Where They Came From*, William Woys Weaver highly praised Jackson Wonder for baby pods that are so tender they can be cooked like snow peas and mature beans so handsome they make a stunning bead necklace. Introduced in 1888, Atlanta farmer Thomas Jackson's drought-tolerant variety created a sensation for its productivity, even though it stands only 18" tall. "We love the flavor and ease of growing Jackson Wonder," concludes Twin Oaks' Pam Dawling. See her new book *Sustainable Market Farming*, #**9855** in our books section. Wonder features about 3 seeds per curved pod, grey in the shell stage and drying to buff with lovely purple and black mottling, as succulent as they are decorative. Its sweet-smelling white flowers attract butterflies. ③

A=2oz, $1.40 **B**=8oz, $4.00 **C**=1lb, $7.00
D=5lb, $20.00 **E**=10lb, $35.00

325KG King of the Garden Pole (106 days) Also known as Henderson's Leviathan, for those with a season long enough to grow pole limas. Developed from a cross between Large White and Dreer by Frank S. Platt in 1883. Platt selected five- and six-seeded Large White pods so that King's long 8" pods dependably produce at least 4 large creamy-white seeds of splendid quality over an extended harvest period. Gregory called them the standard late pole lima and advised in his 1917 catalog that the plants are extremely vigorous so that "no more than two should be allowed to grow to a pole." Indeed, the vines can grow 10' high on fertile ground! *Caution: Not adapted to northern areas.* ③

A=2oz, $1.60 **B**=8oz, $4.50 **C**=1lb, $7.50 **D**=5lb, $26.00
E=10lb, $45.00



All prices are not created equal and not all is what it seems to be: unlike most seed companies, we do not charge shipping on orders over $30. When comparing prices also be sure to factor in our generous discounts.

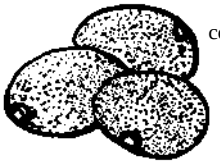
SHELL AND DRY BEANS *P. vulgaris*

2 oz packet sows 25 ft; 1 lb, 200 ft. All bush beans except where noted. In conditions of high nitrogen fertility some bush beans may develop vines in moist hot weather.

Allow beans to dry on the vine until pressing them with your fingernail leaves no indentation. If heavy rains threaten just before maturity, pull plants by the roots and hang them in a dry place to finish or pick pods and finish drying indoors. 2011 and 2013 were difficult years for drying down beans.

326DW Taylor Dwarf Horticultural (68 days shell) Also known as Speckled Bays, this pre-1800 heirloom bush shell bean produces cream-colored pods early. Pods are ready to shell when carmine-red splashes appear. Shell right after picking, boil until tender (30–45 minutes) and mix with olive oil, chopped garlic and parsley for a late summer treat. Buff seed with red stripes. ③

A=2oz, $1.50 **B**=8oz, $3.80 **C**=1lb, $6.50 **D**=5lb, $20.00
E=10lb, $35.00 **K**=25lb, $75.00 **L**=50lb, $140.00



328VC Vermont Cranberry (70 days shell, 95 days dry) A New England tradition since before 1800. Pods contain 5 to 6 speckled cranberry-colored shell beans. Reliable, hardy and easy to shell. Seed grown in Maine. Occasional tendency to viney habit. ①

A=2oz, $1.70 **B**=8oz, $5.20 **C**=1lb, $8.50
D=5lb, $32.00 **E**=10lb, $55.00

331CO Silver Cloud Cannellini OG (70 days shell, 90 days dry) Our trialer says Silver Cloud compares to a regular cannellini only in that they both have white seeds. Green with bright pink streaking, Silver Cloud's short fat 5–6" pods contain five plump seeds instead of the eight skinny ones found in most cannellini pods. The overall appearance is more like that of a #**326** Taylor Horticultural bean than of a typical white kidney bean. These make absolutely superb shell beans and are amazingly early, ripening as much as two weeks sooner than others in the cannellini pack. No wonder our purchaser Nikos Kavanya and trialer extraordinaire Donna Dyrek lobbied so fervently for their inclusion. ID-certified. ①

A=2oz, $2.00 **B**=8oz, $6.00 **C**=1lb, $10.50 **D**=5lb, $49.00

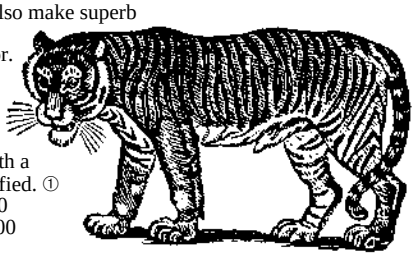
332CN Cannellini (80 days shell, 100 days dry) *Last call* for Cannellini, also known as Cannelone, and predating 1900. We have replaced it with #**331** Silver Cloud, but still have 287 A-size packets left of this half-inch white kidney shell bean that is able to perform in cool weather. The mild-tasting beans become tender when cooked, perfect for minestrone and other soups or stews. ①

A=2oz, $1.90

334BC Black Coco (60 days shell, 85 days dry) A triple-treat bean that is a joy to grow because it is so easy. 2' plants set abundant 5" round pods of plump shiny black seeds that resist shattering in the garden, yet are easy to shell. Coco can be harvested as a green bean or ten days later as a good shell bean, but really comes into its own as a refried or soup bean. Cooks quickly with a delicious aroma that promises a hearty robust soup. ③

A=2oz, $1.60 **B**=8oz, $4.50 **C**=1lb, $7.50 **D**=5lb, $28.00
E=10lb, $45.00 **K**=25lb, $95.00

335TO Tiger Eye OG (65 days shell, 85 days dry) Also called *Pepa de Zapallo*, originally from Argentina and Chile and known to me from the Abundant Life Seed Foundation collection. Among the most beautiful of all beans, bright golden ochre with maroon swirls. That would be reason enough to grow them, but they also make superb fresh shell and delicious baked beans with rich full-bodied flavor. Wide 4" pods fill with large flattened kidney-shaped seeds mostly white at the shell stage but taking on more yellow as they dry. Bush plants grow 2' with a slight tendency to vine. ID-certified. ①



A=2oz, $2.10 **B**=8oz, $6.00
C=1lb, $11.00 **D**=5lb, $50.00
E=10lb, $90.00

336KE King of the Early (85 days) Beautiful mottled red baking bean. Seed propagated from a sample sent to us years ago by seed-saving customer Linwood Ware. King's ability to ripen early, its capacity to swell enormously when soaked, its utter dependability through hot summers and cool, and its robust flavor won our hearts. We've found King easy to grow and heavy yielding year after year. Seed grown in Maine. ①

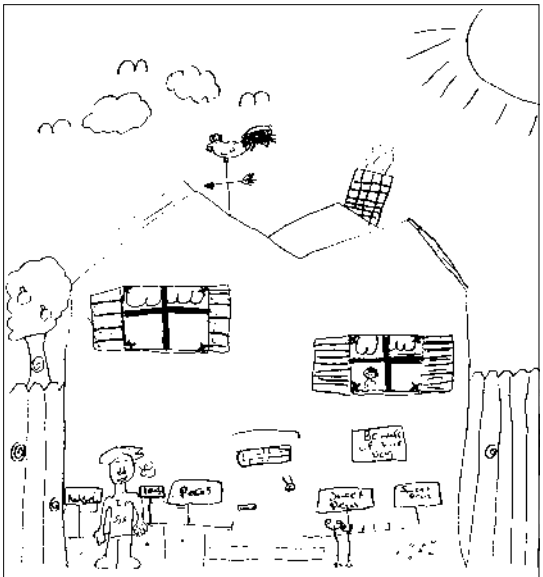
A=2oz, $1.60 **B**=8oz, $4.50 **C**=1lb, $7.00 **D**=5lb, $30.00
E=10lb, $50.00 **K**=25lb, $100.00

337RO Ireland Creek Annie OG (85 days dry) This English heirloom introduced to Canada in the 1920s gets its name from the farm in British Columbia where it has been grown since the '30s. Stocky 24" plants show good cold-weather emergence and tolerance to climatic extremes, setting 5–6" flat oval pods that dry early. Light brown oval seeds shell easily and cook down into a rich creamy sauce with a superb mellow earthy flavor treasured by devotees. MOFGA-certified. ①

A=½oz, $1.60 **B**=2oz, $2.50 **C**=8oz, $8.00 **D**=1lb, $15.00
E=5lb, $50.00 **K**=10lb, $95.00

338MF Marfax (86 days) Heirloom resembling Swedish Brown Bean, but earlier and higher yielding. Richly flavored brown baking bean very well adapted to our cool climate. Golden-tan seed produced in Maine. ①

A=2oz, $1.60 **B**=8oz, $4.50 **C**=1lb, $7.00 **D**=5lb, $30.00
E=10lb, $50.00 **K**=25lb, $100.00 **L**=50lb, $180.00



Which Gardens to Plant

There is a natural flow to the years;
and gardens here to match.

Our first gardens were small,
to match the time available,
but quickly they grew.

Across the road,
bounded mostly by the grape arbors
and the hazelnuts,
is the biggest space,
close to a fifth of an acre.
Here's where you grow crops
that take space,
the ones that sprawl,
like squash and potatoes,
and the ones that want long rows
to produce enough,
like dry beans and sweet corn and flour corn.

For a few years
we had so much that we could have fun
at the Mount Vernon Farmer's Market,
selling the extras and sharing with others.

Then we started moving granite blocks around,
and the space in front of the house took shape.
It's about five hundred square feet,
plenty for a small home garden,
convenient to the kitchen.

The space dries out early
except for the southeast corner
where overflow from the dug well
accumulates until the water table drops in mid-May.

All the little plantings that are scattered around the house
and yard weren't planned.
Someone would give us a plant,
and we would find a space.

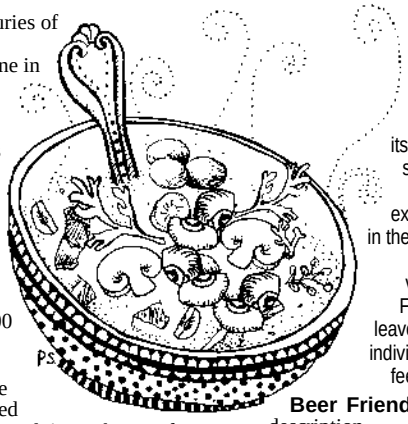
You'll find it's the same for you.
There's a plant you like,
or someone divides a perennial,
and suddenly the lawn shrinks again.

I've dreamed the terraces for almost a decade,
and now they're starting to take shape.
I have a little map that reflects what I think
might happen, but you can turn them into what
makes sense to you, what gives you pleasure—
flower gardens, veggies, flowering shrubs,
fruit bushes—even lawn, although I hope
that won't be the choice.

Just approach it one space at a time,
and soon the beauty
will reflect your dreams.

340HO Hutterite OG (88 days) After enduring centuries of persecution in Europe, the Hutterites, a communal Anabaptist sect, came to South Dakota from the Ukraine in the 1870s. Although there is no real evidence to back the claim, this bean has been credited to their cultural heritage. Instead it may be a Russian selection of the China Yellow bean that has been grown by Americans and Canadians since the 1820s. The greenish-tan plump beans with a charcoal ring around the hilum cook into delicious creamy chowder in a little under an hour. 2–3' bushes are good yielders. All seed is held over. Listed on Slow Food's Ark of Taste. MOFGA-certified. ①

A=1/2oz, $1.60 **B**=2oz, $2.50 **C**=8oz, $8.00
D=1lb, $15.00 **E**=5lb, $50.00 **K**=10lb, $95.00



344JO Jacob's Cattle OG (88 days) Popular New England heirloom may have originated with Native Americans in the Southwest. Derives its name from the biblical story of Jacob and the spotted cattle. Its dark red speckles on white background are said to look like the cattle's markings. If harvested earlier, the kidney-shaped beans make superb shellies. MOFGA-certified. ①

A=2oz, $2.10 **B**=8oz, $6.50 **C**=1lb, $12.00 **D**=5lb, $45.00
E=10lb, $80.00

350SD Soldier (89 days) Balance the budget by bringing our Soldiers home to their own gardens! Unlike our soldiers in faraway wars, these Soldiers have a clear winnable mission within a defined timetable: to reproduce themselves for our mutual benefit! Large drought-tolerant white kidney beans with red-brown soldier-like figures on the eyes. A New England favorite for generations. Seed grown in Maine. ①

A=2oz, $1.60 **B**=8oz, $4.50 **C**=1lb, $7.00 **D**=5lb, $30.00
E=10lb, $50.00 **K**=25lb, $100.00 **L**=50lb, $180.00

353KE Kenearly (89 days) Yellow Eye is one of the signature varieties of Maine bean hole suppers. Kenearly, a selection of Yellow Eye, was developed at the Kentville, Nova Scotia, research station. Very similar to the Maine Yellow Eye strain we formerly sold, but with slightly larger eye and more uniform maturity. Plump oval medium-sized beans, cream with yellow eye. Seed grown in Maine. ①

A=2oz, $1.60 **B**=8oz, $4.50 **C**=1lb, $7.00 **D**=5lb, $30.00
E=10lb, $50.00

Aunt Jean's Pole ECO (90 days) *Crop failure; not available in 2014.*

356CP Calypso (90 days) Also called Orca or Yin-Yang bean. A dramatic find at the 1992 Common Ground Country Fair Exhibition Hall where its stark markings uncannily similar to the Chinese symbol commanded our attention. This black and white dry bean even includes a contrasting dot. Not as heavy a yielder as King of the Early, Calypso dependably produces 4–5 beans per pod, with a texture similar to Yellow Eye. Doubles in size when cooked. Seed grown in Maine. ①

A=2oz, $1.70 **B**=8oz, $5.50 **C**=1lb, $9.00 **D**=5lb, $32.00
E=10lb, $55.00

Monos Negros OG (90 days) *Crop failure; not available in 2014.*

366PO Agate Pinto OG (92 days) Mostly bush pinto with medium-sized mottled beans of rich spicy flavor. Hailed as a breakthrough when introduced in 1982 by Rogers Bros. who dwarfed most of the typical vininess out of pintos and made Agate easy to harvest. An occasional plant (less than 5%) will still send out sprawling runners. Excessive nitrogen use can induce additional vining. Quick cooking, the essential bean in Mexican cuisine. ICS-certified. ①

A=2oz, $2.20 **B**=8oz, $8.00 **C**=1lb, $15.00 **D**=5lb, $60.00
E=10lb, $110.00

371CO True Red Cranberry Pole OG (102 days) This is one of the most difficult seed crops for us to produce, being slow-growing and finicky, especially in cool moist seasons. Nevertheless, it is well worth the effort as it is one of the best baking beans. Inspired by a description of "Red Cranberry" in a 1700s gardening encyclopedia, legendary bean collector John Withee, after an 11-year search, finally obtained it from a Mr. Taylor of Steep Falls, ME. The plump round maroon seeds without streaking look like Thanksgiving cranberries, unlike the speckled oval bush cranberry types. One of our oldest varieties, probably Native American, True Red Cranberry is listed on Slow Food's Ark of Taste. Won plaudits for its rich full-bodied flavor at our staff taste test. Soak seeds for 24 hours to aid germination. MOFGA-certified. ①

A=1oz, $1.80 **B**=2oz, $3.20 **C**=8oz, $9.00 **D**=1lb, $17.00

376RK Red Kidney (102 days) An early-maturing light-red kidney bean developed at Cornell University. A favorite for chili and minestrone. Large beans mature at least a week earlier than similar types. Seed grown in Maine. ①

A=2oz, $1.60 **B**=8oz, $4.50 **C**=1lb, $7.00 **D**=5lb, $30.00
E=10lb, $50.00 **K**=25lb, $95.00 **L**=50lb, $180.00

384BT Midnight Black Turtle (102 days) The original Black Turtle was offered in 1832 by Grant M. Thorburn, one of the first U.S. seedsmen. This strain, an improved upright bush version of the heirloom, was more recently developed at Cornell. Small black beans with rich spicy flavor popular for soup. Seed grown in Maine. ①

A=2oz, $1.70 **B**=8oz, $5.20 **C**=1lb, $8.50 **D**=5lb, $32.00
E=10lb, $55.00 **K**=25lb, $125.00

SOYBEANS *Glycine max*

Half oz packet sows 10 ft; 1 lb, 320 ft. Avg 80 seeds/oz. Used in China more than 2,200 years ago, then introduced into Japan. The Japanese call them *edamame* (eh-dah-*mah*-may), meaning "bears on branches," and boil and salt them like beer nuts. Encouraged by its recent popularity surge, breeders are selecting for larger pods with sweeter beans. *Edamame* are day-length sensitive. Sow around the same time as sweet corn and harvest when most of the pods have expanded but are still green without yellowing. For best flavor harvest in the evening. Boil the pods for 5 minutes, chill quickly for easy shelling. Refrigerate the leftover beans immediately. *Edamame* are rich in vitamins A, C and E, calcium, phosphorus, protein and dietary fiber. Fresh-market growers often cut off plants near the base, remove the leaves and bunch into 1 lb units, eliminating their need to pick each pod individually. Soybean seed is easy to save; expect about 1 lb per 10 row feet if you can control Japanese beetles and keep woodchucks away!

Beer Friend (87 days) Consult our website for availability, price and description.

489FO Shirofumi OG (90 days) Vigorous thigh-high vines make early concentrated sets of light green pods, averaging two beans per pod. The 10-day picking window is generally from late August through early September. An excellent substitute for limas in short-season areas. Our stock seed came from Tom Vigue, who has done considerable trials and selection work with this crop. Two seed lots held over; tested at a minimum of 86%. ID-certified. ①

A=1/2oz, $1.60 **B**=2oz, $4.00 **C**=8oz, $10.00 **D**=1lb, $18.00
E=5lb, $80.00

490TK Tankuro (90 days) In Japan, edamame grown from black-seeded varieties are deemed to have a richer and sweeter flavor than those from the traditional green or tan-seeded kinds. Tankuro was the winner for productivity and pleasing flavor in our 2010 trial to find the best black-seeded variety. In its exceptional heat, our May 25 planting produced robust 3' plants loaded with pods packed with an average of 2.4 beans each. They ripened beginning Aug. 17, the same day as Shirofumi. In the less favorable 2013 season, they would probably have come in around September 1. Harvest promptly when the immature seeds are bulging yet the pods are still dark green, before the plants begin to yellow. Those pods that you miss will dry down, maturing beautiful black pearls that can provide your planting stock for next year. *Seed in short supply; order early.* **BACK!** ①

A=1/2oz, $2.00 **B**=2oz, $5.50

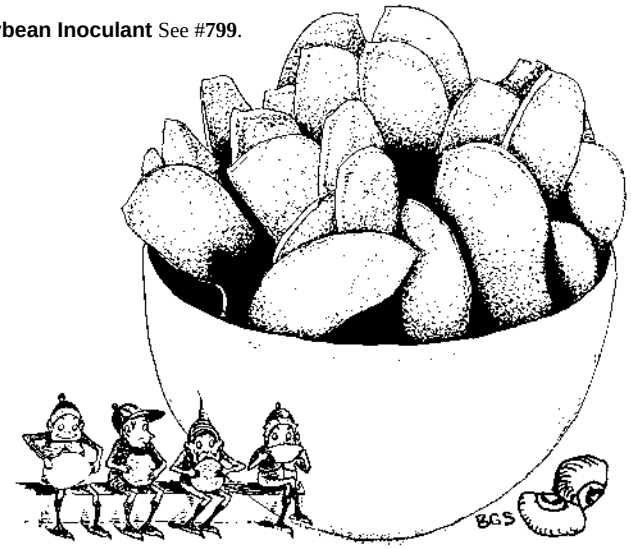
492SO Sayamusume OG (92 days) Ripens just after Shirofumi with longer, darker pods and sweeter beans. The best-tasting variety in CR's and Roberta's grow-outs with an appealing sweetness if allowed to ripen fully. 2.21 beans per pod in our plot, compared to 1.99 for Shirofumi. Ripens Aug. 25 for us most years; early September in cold seasons. MOFGA-certified. ①

A=1/2oz, $1.60 **B**=2oz, $4.00 **C**=8oz, $10.00

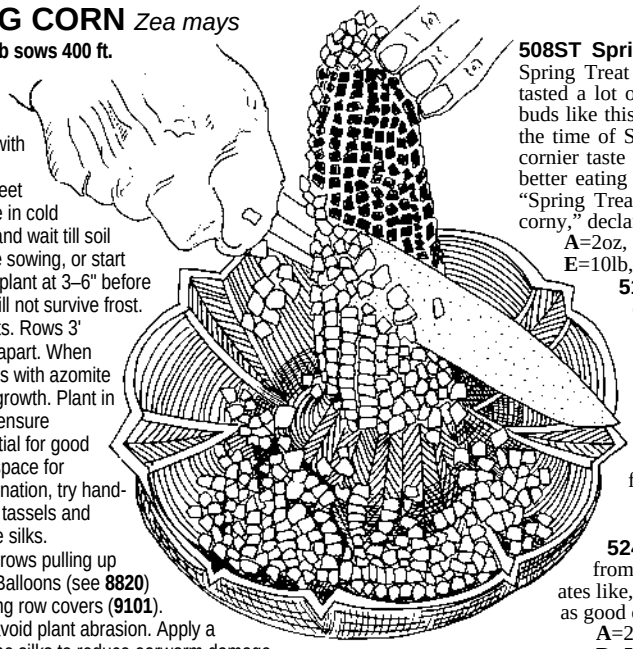
493MO Giant Midori OG (93 days) Last year's information was incorrect; this selection is the latest, not the earliest, in our edamame roster. It ripens right after Sayamusume for our inventory manager Roberta Bailey, but staggers its crop in three pickings, ideal for home gardeners. And as its name implies, it is not compact but instead is 3–6" taller than Shirofumi. It is also a heavier cropper than Shirofumi, laden with fat pods each filled with two or three very sweet buttery beans, that "seemed to hold in the field better without yellowing," according to Melinda Fields of Turtle Ledge Farm in Hampton, CT. Despite its lateness, Fields implored us to keep stocking it. My ravenous family of groundhogs would agree! Recommended for both home enjoyment and commercial production as well as for feeding your chucks. SC-certified. ①

A=1/2oz, $2.00 **B**=2oz, $5.50 **C**=8oz, $17.00 **D**=1lb, $28.00

Soybean Inoculant See #**799**.



AMAIZING CORN *Zea mays*



2 oz packet sows 50 ft, 1 lb sows 400 ft. Seeds per packet vary, with open-pollinated selections having the fewest and sugary enhanced varieties with shrunken seeds the most.

CAUTION: Untreated sweet corn seed will not germinate in cold wet soil. Please be patient and wait till soil warms to at least 60˚ before sowing, or start seedlings indoors and transplant at 3–6" before taproots take off. Tender, will not survive frost. Heavy nitrogen requirements. Rows 3' apart, 4 seeds/ft. Thin to 1' apart. When corn is knee-high, side-dress with azomite or alfalfa meal to stimulate growth. Plant in blocks of at least 4 rows to ensure adequate pollination, essential for good tip fill. If you lack sufficient space for enough plants for good pollination, try hand-pollinating by cutting off the tassels and shaking their pollen onto the silks.

If you have trouble with crows pulling up seedlings, try Bird-Scaring Balloons (see **8820**) or cover sowings with floating row covers (**9101**). Remove covers at 3–6" to avoid plant abrasion. Apply a few drops of mineral oil to the silks to reduce earworm damage. Interplant with pumpkins to discourage marauding critters.

Seed catalogs in the 1800s featured "Indian Corn," decorative multi-colored ears with soft starchy kernels easily ground into flour or with flinty kernels often used to make corn meal and grits (**680**-**692**); dent corn with indented kernels eaten fresh or roasted in the milk stage or used to make flour, corn meal, grits and cereal; field corn for animal forage and silage (**8061**-**73**); and sugar corn, forerunner of today's sweet corn. Sweet corn seed, probably originally a mutation of flint or dent corn or both, first appeared in commerce in 1828 and became popular a generation later. As sweet corn became the first crop to be hybridized, most of the open-pollinated varieties disappeared between 1930 and 1970. Less sweet than modern hybrids, open-pollinated varieties also do not hold as long, and will come back into vogue only if taste preferences change.

All sugary enhanced sweet corn traces back to a single inbred developed in the 1960s in Illinois by Dr. Dusty Rhodes, ILL677a. Our trialers have found SE corn to be especially suitable to our climate, with good cool-soil tolerance and a near-perfect blend of sugars and corn flavor.

A new breeding frontier for sweet corn? Increasing its levels of beta carotene—the more orange the kernel the greater the beta carotene content.

We randomly test sweet corn seed for transgenic contamination; see page 9.

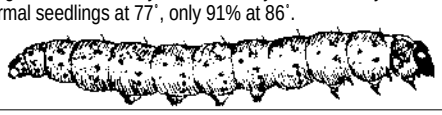
We cold-test all significant carryover lots of sweet corn seed and post results on our website. Cold-testing mimics spring conditions and assesses suitability for sowing in cool soils.

The corn smut fungus *Ustilago maydis*, formerly scorned, is increasingly considered a great delicacy. *Huitlacoche*, as it is known in Latin America, is featured in fine restaurants. In a test of 350 hybrid corns, the University of Illinois found that #**658** Silver Queen is one of the best for producing large clusters of smut galls.

According to Robert Kourik in *Roots Demystified* (ISBN 978-0961584832), corn develops an amaizing root system. By the time a plant has just eight leaves, it has produced 15–23 main roots and an astonishing 8,000–10,000 lateral roots.

Anne Elder of Community Farm of Ann Arbor was quoted in *The New York Times* saying that "when kids visit the farm, we give them cornstalks to chew." Like sugar cane, cornstalks contain sweet juice.

Minimum soil temperature 50˚, optimal temperature range 60-95˚, optimal temperature 80˚. Emergence takes 22 days at 50˚,12 days at 59˚, 7 days at 68˚, only 4 days at 77˚. 98% normal seedlings at 77˚, only 91% at 86˚.



Most of the information in our pest management sidebars comes from Cornell's *Resource Guide for Organic Insect and Disease Management* (available online).

Pest: corn earworm
Cultural controls: use resistant varieties with tight husks such as #**541** Bodacious R/M or #**658** Silver Queen, choose short-season varieties, release trichogramma wasps. (Beneficial insects are available from Beneficial Insectary at insectary.com or 800-477-3715.)
Material controls: *Bt Kurstaki* (Dipel **8902**-**8906**), Spinosad (**8922**-**4**)

Pest: European Corn Borer (ECB) and fall armyworm
Cultural controls: mow and disk old corn stalks into the soil, release trichogramma wasps (found to give better control than insecticides in research by Cornell's IPM program on five organic farms) for ECB; none known for fall armyworm.
Material controls: *Bt Kurstaki*, Spinosad

YELLOW SWEET CORN

508ST Spring Treat (71 days) The choice of early corn cornoisseurs, Spring Treat continues to be by far our most popular sweet corn. We've tasted a lot of new earlies in recent years, but none have zinged our taste buds like this yellow **sugary enhanced hybrid**. Spring Treat ripens around the time of Sugar Buns, with longer ears that are easier to pick and a rich cornier taste unusual for an early ripener. Not as sweet as Sugar Buns, but better eating quality, ear length and appearance than any other early corn. "Spring Treat has been my favorite for years, always reliable, sweet and corny," declares Janine Welsby of Wellsville, OH. ⑤
A=2oz, $3.80 **B**=8oz, $15.00 **C**=1lb, $28.00 **D**=5lb, $130.00 **E**=10lb, $250.00

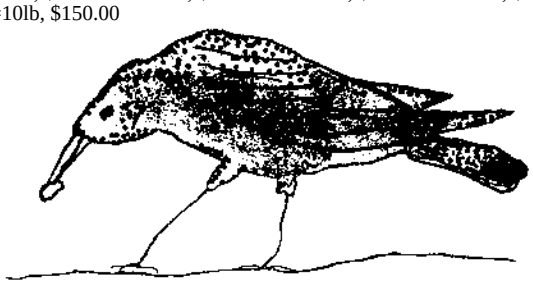
516AO Ashworth OG (72 days) A composite of early varieties originally developed by the late Fred Ashworth of St. Lawrence Nurseries and marketed by Johnny's Selected Seeds starting in 1978. According to legend, Ashworth originally named his variety "Rat Selected" in honor of the rodents who broke into his seed storage room and alerted him to certain kernels that they preferred. Its short stalks have 6–7" yellow ears with good flavor. Be sure to harvest it at peak milk stage—like all **open-pollinated** corn it does not hold quality for long in the field. Germinates well in cool soil. ID-certified. ①
A=2oz, $2.50 **B**=8oz, $8.50 **C**=1lb, $16.00 **D**=5lb, $75.00 **E**=10lb, $140.00

524SB Sugar Buns (74 days) Yellow **sugary enhanced hybrid** from Crookham with sublime tenderness. About as sweet as our palates like, but not cloying like the supersweets. Sugar Buns does not have as good cold-soil emergence as other early corns; please don't rush it. ②
A=2oz, $2.50 **B**=8oz, $9.00 **C**=1lb, $17.00 **D**=5lb, $80.00 **E**=10lb, $155.00

541BS Bodacious RM (77 days) A bold flavor for a bold name, Crookham's **sugary enhanced hybrid** dependably produces outstanding 8" ears with exceptionally sweet corny tender yellow kernels. Same as the original Bodacious but with enhanced disease resistance. Some report it to be a fussy germinator. Resistant to ST, MDMV and R. ②
A=2oz, $2.50 **B**=8oz, $8.50 **C**=1lb, $16.00 **D**=5lb, $75.00 **E**=10lb, $145.00

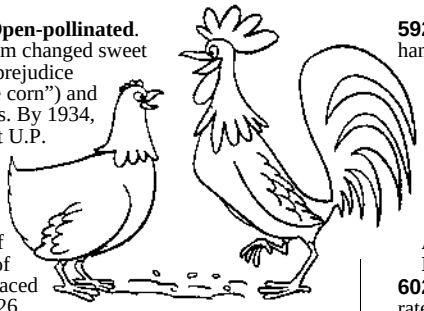
547HS Honey Select (80 days) For those who like firm flavorful crunchy kernels, here is one honey of a corn. Honey Select pops in your mouth with a distinctive sweetness that mixes well with its flavor. During the taste test, evaluator Heron Breen said it took all his will power not to gobble every ear from Donna Dyrek's table. He made repeat visits to Donna's corn patch to trade his extra trial melons for more Honey Select. He and Anne Hallee, coordinator of lot grow-outs, agreed that it tasted "like the best corn of our childhoods." **TripleSweet sugary enhanced hybrid** produces refined 8" ears with 18–20 rows of subtly colored golden-yellow kernels. Contains 25% supersweet kernels on each ear but need not be isolated from other varieties to retain optimal flavor. ⑤
A=2oz, $2.50 **B**=8oz, $9.50 **C**=1lb, $18.00 **D**=5lb, $85.00 **E**=10lb, $160.00

558SP Sumptuous (81 days) Sumptuous lives up to its lavish name. By far the best of the 11 entrants in our 2008 Loon Song corn feast, this **sugary enhanced homozygous hybrid** delivered a distinctive grassy flavor that pleased our tasters. Not overwhelmingly sweet, the tender juicy yellow kernels had just what this Silver Queen lover craves. Handsome 20-rowed 8½" ears well-swathed in protective husks also have the looks that market growers want. Outperformed Bodacious in our taste test. ⑤
A=2oz, $2.40 **B**=8oz, $9.00 **C**=1lb, $17.00 **D**=5lb, $80.00 **E**=10lb, $150.00



Inspector Crow

Those crows are so damn smart,
it's easy to imagine them, bespectacled,
working out their theories
in the laboratory of the field,
pulling out one seedling after another,
and isn't it strange that they cleaned up the sweet corn first,
then the Painted Mountain flour corn,
and left the hybrid popcorn for last?
Weeding around the popcorn,
each whorl filled with morning dew,
I hope they leave enough to make a crop.
Why couldn't they pull weeds instead?



559GB Golden Bantam (85 days) **Open-pollinated**. Upon its release in 1902, Golden Bantam changed sweet corn preferences, overcoming popular prejudice against yellow corn (once called "horse corn") and ending the dominance of white varieties. By 1934, Bantam had so captured the market that U.P. Hedrick wrote in *The Corns of New York*, "This has been for several years the most popular sweet corn for all purposes. The name has become so thoroughly impregnated in the minds of the growers and consumers that many of them will not accept anything else." Graced Burpee's 50th Anniversary cover in 1926 and Johnny's cover in 1980. Long narrow 7" ears sit on 5–6' stalks. Rich in old-fashioned corn flavor if picked promptly at maturity. But, like most open-pollinated corn, Bantam passes *quickly* through the milk stage and gets tough. Be alert and check daily as ripeness approaches. Ripe ears are thinner than for modern hybrids and can fool you if you don't look closely. All seed is held over; germs at 80%. *This is the last year we will carry.* ③

A=2oz, $1.60 **B**=8oz, $4.50

561NM Incredible RM (85 days) Crookham's superior late-midseason gourmet selection was a full tassel-length ahead of the competition at our trial, where its handsome 8" tip-filled yellow ears were incredibly scrumptious. Crookham calls it the most popular **homozygous sugary enhanced hybrid** in the world. Incredible is not merely sweet, it really delivers a deep corn taste. Good husk protection and tolerance to ST, enhanced resistance to MDMV and R. Poor cold-soil emergence. ②

A=2oz, $2.40 **B**=8oz, $8.50 **C**=1lb, $16.00 **D**=5lb, $75.00 **E**=10lb, $135.00

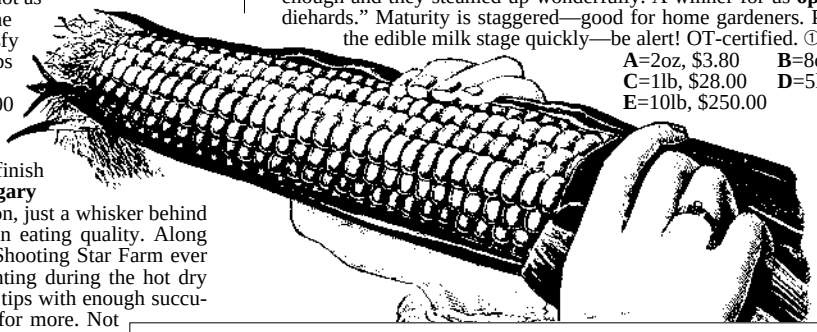
564KK Kandy Korn (89 days) Attractive deep purple husks and excellent holding quality make this **hybrid** yellow corn a real winner at roadside stands. One of the first **sugary enhanced** varieties, Kandy Korn has stood the test of time and continues to enjoy well-deserved popularity. Tolerant to ST, R. ⑤

A=2oz, $2.20 **B**=8oz, $7.00 **C**=1lb, $13.50 **D**=5lb, $65.00 **E**=10lb, $125.00

BICOLOR SWEET CORN

574ES Espresso (70 days) Quicker than quicksilver, fleeter than Fleet, springier than Spring Treat, this **hybrid synergistic cross** bicolor bursts out of the gate and flashes to the finish. In 2012 Donna enjoyed her first ears on Aug. 18, 3–5 days before her Spring Treat. Though not as long as the midseason corns, these 6" ears retained the good balance between sweet and corny that will satisfy your early corn craving. Our tasters gave a big thumbs up. Tolerates R, ST. ②

A=2oz, $2.60 **B**=8oz, $10.00 **C**=1lb, $19.00 **D**=5lb, $90.00 **E**=10lb, $175.00



577FL Fleet (72 days) In sweet corns, the race is not always to the fleet. Most of the corns first to the finish line don't deliver on flavor. Fleet, a **homozygous sugary enhanced hybrid** version of Quickie, is the exception, just a whisker behind Quickie in maturity, but several mouthfuls ahead in eating quality. Along with Quickie, Fleet became the first sweet corn at Shooting Star Farm ever to ripen in July (the 26th) from mid-May transplanting during the hot dry spring of 1999. The 7" bicolor ears fill nicely to the tips with enough succulence to bring your roadside-stand customers back for more. Not as good cold-soil emergence as Quickie, but its superior flavor tips the balance for us. ②

A=2oz, $2.50 **B**=8oz, $9.00 **C**=1lb, $17.00 **D**=5lb, $80.00 **E**=10lb, $155.00

582AM Ambrosia (75 days) Ah! Those heavenly moments of high summer! Out of the pot come steaming ears of bicolor bliss covered with dewdrops of condensation. Into my mouth where the tender corny kernels mix their sweetness into a total sensation of ambrosial delight. Our corn tasters, for all their enjoyment of the process, are a contrary lot, so when they come to consensus, as they did on Ambrosia, we know we've found something good. This **homozygous sugary enhanced hybrid** is perfect for a wide range of markets, from fresh home-garden use to long-distance shipping. The 6½' plants show good early vigor. In stressful conditions the tips don't always fill. Tolerates ST. ②

A=2oz, $2.50 **B**=8oz, $9.00 **C**=1lb, $17.00 **D**=5lb, $80.00 **E**=10lb, $155.00

588LO Luscious OG (77 days) Light up your taste buds with lip-smacking lusty Luscious! If you like your corn sweet, Luscious really lives up to its name. With a good balance of sugars and corn taste, the attractive blunt 8" ears are just what you want in an early midseason bicolor. Easy to grow, too, with good cold-soil emergence and early vigor. A breakthrough for the folks at Mesa Maize, Luscious was their first organically produced variety. **TripleSweet sugary enhanced hybrid**. CO-certified. ⑤

A=2oz, $4.10 **B**=8oz, $16.00 **C**=1lb, $30.00 **D**=5lb, $145.00 **E**=10lb, $270.00 **K**=25lb, $600.00

592SP Sparkler (78 days) Put a sparkle on your face next August with this handsome high-yielding **hybrid synergistic** bicolor corn. The long fat pointy ears, up to 9" with up to 18 rows, speak loudly of abundance and satisfy the most discriminating of cornoisseurs. Plenty of good husk protection, long flag leaves and tillers for market growers who demand a strong easy-to-harvest plant. Ripened for Donna Aug. 23, 2010, from a June 3 sowing, two days ahead of her #**541** Bodacious. Didn't sparkle in the sales department in its 2013 debut, so we held over the seed and we have reduced its price to tempt you. Tested at 92% this fall. Tolerates R and ST. ②

A=2oz, $2.30 **B**=8oz, $9.00 **C**=1lb, $17.00 **D**=5lb, $80.00 **E**=10lb, $145.00

602LL Lancelot (82 days) We took notice when Loon Song Farm trialers rated this midseason bicolor **sugary enhanced hybrid** as better than Burgundy Delight. Lancelot has a lot going for it besides its sweet tender kernels. It snaps easily, is very drought tolerant, and shows good tip fill. Tolerant to ST. ⑤

A=2oz, $2.80 **B**=8oz, $11.00 **C**=1lb, $20.00 **D**=5lb, $95.00 **E**=10lb, $180.00

604SD Serendipity (82 days) Full-bodied flavor with good balance between sugary and traditional corn taste. Serendipity has the soft-crisp creamy texture and heavenly bouquet that you will want to savor again and again. Along with #**547** Honey Select, Heron's favorite in the 2011 trials. A **sugary enhanced** variety spiked with **25% supersweet genes** (no, they're not transgenic!), it should be isolated from other sweet corn varieties to bring out its best. Market growers will like its extended harvest window. **TripleSweet hybrid** features 7–8" bicolor ears with good tip fill. Resistant to SCLB. ⑤

A=2oz, $2.50 **B**=8oz, $9.00 **C**=1lb, $17.00 **D**=5lb, $80.00 **E**=10lb, $155.00

MULTICOLOR SWEET CORN

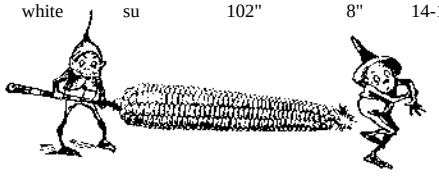
616HO Painted Hills OG (80 days) A work of three geniuses: Dave Christensen, the breeder of #**680** Painted Mountain Corn, Alan Kapuler, former Seeds of Change research director, and Luther Hill, developer of the corn of the same name in 1902. Kapuler crossed Christensen's Painted Mountain Indian Corn to venerable heirloom Luther Hill. The resulting vigorous 6–7' plants emerge rapidly and tolerate cool soil well. They average two 8" ears with fairly thin tight husks that are hard for earworms to penetrate. Mostly white kernels, but often interspersed with yellows, reds, purples, *multicolors in the fresh eating stage.* Garland, ME, breeder Relentless found "real oldtimey corn taste, not too sweet, but sure sweet enough and they steamed up wonderfully. A winner for us **open-pollinated** diehards." Maturity is staggered—good for home gardeners. Passes through the edible milk stage quickly—be alert! OT-certified. ①

A=2oz, $3.80 **B**=8oz, $15.00 **C**=1lb, $28.00 **D**=5lb, $130.00 **E**=10lb, $250.00

SWEET CORN SELECTIONS AT A GLANCE

variety	item #	days	color	type*	avg height	ear length	# rows
Spring Treat	508	71	yellow	se-se	72"	7-8"	14
Ashworth	516	72	yellow	op	60"	6-7"	12
Sugar Buns	524	74	yellow	se-se	76"	6-7"	14
Bodacious RM	541	77	yellow	se-se	87"	8"	18
Honey Select	547	80	yellow	se-se-se-sh2	84"	8"	18-20
Sumptuous	558	81	yellow	se-se	76"	8-9"	20
Golden Bantam	559	85	yellow	op	66"	7"	8
Incredible RM	561	85	yellow	se-se	90"	8"	18
Kandy Korn	564	89	yellow	se	102"	8"	16
Espresso	574	70	bicolor	se-su-sh2	72"	6"	12-16
Fleet	577	72	bicolor	se-se	60"	7"	14
Ambrosia	582	75	bicolor	se-se	78"	8"	16
Luscious	588	77	bicolor	se-se-se	75"	8"	16-18
Sparkler	592	78	bicolor	se-su-sh2	84"	8-9"	16-18
Lancelot	602	82	bicolor	se-se	84"	7-8"	16-18
Serendipity	604	82	bicolor	se-se-se-sh2	75"	7-8"	16-18
Painted Hills	616	80	multicolor	op	78"	8"	7-9
SugarPearl	622	72	white	se-se	72"	8"	14-16
Spring Snow	626	73	white	se-se	66"	7-8"	12-16
Shasta	632	79	white	se-se	79"	8"	16
Augusta	639	84	white	se-se	78"	8-9"	16-18
Silver Queen	658	96	white	su	102"	8"	14-16

*genetic type
op = open-pollinated
su = normal sugary
se = heterozygous sugary enhanced
se-se = homozygous sugary enhanced
sh2 = supersweet
se-se-se = TripleSweet® sugary enhanced



If you plant corns of different color kernels next to each other, you will get some cross-pollination. Separate by 8-10 rows' distance to maintain color purity.

WHITE SWEET CORN

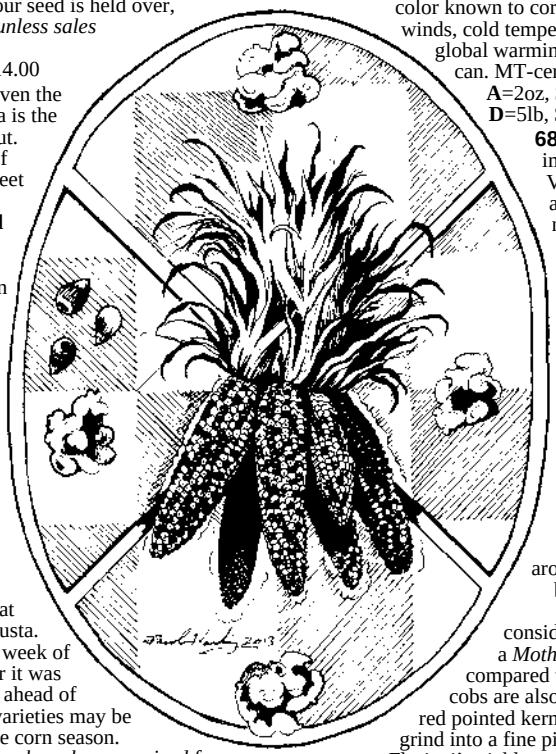
622PO SugarPearl OG (72 days) F-1 hybrid. If you, like my partner Eli, prefer your sweet corn raw, this gem is for you. I enjoyed one in that fashion that was juicy, sweet and refreshing even when harvested days after its prime. I can only imagine how good it would have been at its peak. These are elegant 8" ears with excellent tip fill for such an early maturing variety. This **homozygous sugary enhanced** selection is creamy and delectable, my new favorite among our organic corn options. Though Donna's harvest was delayed till Aug. 28 by the horrible cold wet June, most years it would have been ready a full two weeks sooner. **NEW!** ⑤
A=1oz, $3.50 **B**=4oz, $12.50 **C**=1lb, $45.00

626SS Spring Snow (73 days) **Sugary enhanced hybrid**. We had plenty of spring snow in 2013 and we have plenty of seed for it, too. If you prefer white kernels, don't overlook Spring Snow, an early white sweet corn with a real corny flavor. Delivers 7½" ears of excellent quality for early in the season. Tolerant to ST, resists lodging. ⑤
A=2oz, $2.50 **B**=8oz, $9.00 **C**=1lb, $17.00 **D**=5lb, $80.00
E=10lb, $150.00

632SH Shasta (79 days) **F-1 hybrid**. Not for the sugar shy, Shasta will reward all others with huge mouthfuls of tender juicy superbly sweet corn flavor. The folks at Mesa Maize have rediscovered extreme kernel depth from some of the first hybrids and the best heirlooms. For the feeling of sinking into buttered heaven bite into these extra thick 8" pure white ears and enjoy their rich **homozygous SE** sugars. All our seed is held over, germs at 87%. *This is the final year we will offer unless sales improve.* ⑤
A=2oz, $2.20 **B**=8oz, $7.50 **C**=1lb, $14.00

639GU Augusta (84 days) Having supplanted even the venerable Silver Queen in our estimation, Augusta is the one sweet corn variety Eli and I will not be without. Beginning Aug. 7, 2012, we enjoyed two weeks of delectable delirium with this emperor of white sweet corn that achieves the pearly mean in good eating quality. A **homozygous sugary enhanced hybrid** intermediate in sweetness and length of maturity between Shasta and Silver Queen, it bears perfect substantial 8–8½" cylindrical ears with dark green husks that sit low on 6½' stalks for easy harvest and almost always fill to the tips. Alas, woodchucks beat us to all but seven ears in 2013. ⑤
A=2oz, $2.30 **B**=8oz, $8.00 **C**=1lb, $15.00
D=5lb, $72.00 **E**=10lb, $135.00

658SQ Silver Queen (96 days) Like Sugar & Gold to the previous generation, Silver Queen has become so classic as to constitute a generic brand. Most farmers claiming to offer it have actually switched to more modern hybrids. However, we know some who still prefer to grow the real Queen, and that's what we offer. This white **hybrid** has long set the standard for late-maturing sweet corn with large handsome ears, replete with glossy white creamy sweet kernels that fill to the very tips. I use it as a succession to Augusta. It came in on Aug. 31, 2012, and blessed our first week of September with its delicious lovely ears. This year it was four days later. In colder climates it sneaks in just ahead of those first killing frosts late in September. Other varieties may be sweeter, but I can't think of a better way to end the corn season. *Caution: said to germinate poorly in cold soil, though we have received few complaints.* Tolerant to NCLB, ST. ⑤
A=2oz, $2.20 **B**=8oz, $7.50 **C**=1lb, $14.00 **D**=5lb, $68.00
E=10lb, $130.00



POPCORN

Market grower Jason Kafka says that popcorn is a wonderful novelty for CSA shares.

Japanese Hulless (72 days) No crop. *Not available in 2014.*

671RW Robust 98114W White (98 days) **F-1 hybrid**. Taller, a bit later, higher yielding with larger kernels and ears, and greater poppability than the old Robust 21-82W, this midseason white hull-less popcorn has great eating quality—crisp and tender, light and flaky. The 6' plants have the stalk strength to survive September storms intact. "Nice long thin ears," says Kafka. ②
A=2oz, $1.80 **B**=8oz, $7.00 **C**=1lb, $12.50 **D**=5lb, $58.00
E=10lb, $115.00

675DO Dakota Black OG (100 days) **Open-pollinated.** Outstanding in our observation plots two years in a row. Compact plants with one ear each. Our tasters rated the popcorn "Oh, so scrumptious." In addition to their popping qualities, Dakota Black's 4½" dark maroon-black ears with 15 rows are extremely decorative, a must for the fall roadside stand. 4' stalks. ICS -certified. ①
A=2oz, $2.60 **B**=8oz, $10.00 **C**=1lb, $18.00 **D**=5lb, $85.00
E=10lb, $160.00

677BO Pennsylvania Dutch Butter Flavored OG (102 days) This **open-pollinated** popcorn is so good on its own that you won't need to add any nutritional yeast. Our trialers agreed that it was the best they'd ever tasted: creamy, buttery and delicious. Incredibly green and healthy 8' plants with very long dark green leaves set two 4–6" stocky ears per stalk, with 26–28 rows (occasionally 22) of fat creamy white kernels. Thanks to our friends at Southern Exposure Seed Exchange for enabling us to offer this pre-1885 Pennsylvania Dutch heirloom. SESE was the first to bring this variety to commerce, in 1988. QCS-certified. ①
A=2oz, $3.00 **B**=8oz, $11.50 **C**=1lb, $22.00 **D**=5lb, $100.00
E=10lb, $190.00

679CP Calico (105 days) **Open-pollinated.** An heirloom dual-purpose corn with 5–8" ears that look like smaller versions of Indian corn. The shiny bright ears come in an array of colors, with red, yellow and mottled rosy-brown most common, but brown, purple, blue, white and other combinations possible. Kernels are smaller than those of most Indian corns, but larger than conventional popcorns. Calico is both decorative and edible so you can hang it on your door in fall and pop the very same batch on Thanksgiving. Seed grown by the Biseks in Minnesota. ~7 seeds/g. ①
A=1oz, $1.80 **B**=4oz, $6.00 **C**=1lb, $19.00

ORNAMENTAL & DRY FIELD CORN

All open-pollinated. Days to maturity are for dry stage.

680PO Painted Mountain OG (85 days) Short efficient 5' plants, long thin 6–7" cobs! Painted Mountain is the hardiest, fastest-maturing grain corn in the world. Dave Christensen has spent 39 years developing it in the mountains of Montana from a diverse gene pool of about 80 strains of native corns. Contains vivid golds, oranges, reds and purples, about every shade of color known to corn. High in anthocyanins. Bred to withstand high winds, cold temperatures, intense heat and drought, and to survive global warming. Painted Mountain grows where no other corn can. MT-certified. ①
A=2oz, $4.00 **B**=8oz, $15.00 **C**=1lb, $28.00
D=5lb, $135.00 **E**=10lb, $260.00

682CO Abenaki Calais Flint OG (88 days) An improved strain of Roy's Calais Flint, selected by Vermont seed grower Jack Lazor for 10-row ears and strong feeder roots. The original, kept by the northern Vermont Abenaki tribe for generations, had 8 rows of kernels. Abenakis passed it on to local farmers who shared it with Vermont seedsman Tom Stearns. Stearns has called it the most exciting heirloom he was ever given: "Incredibly early and able to grow well under cold conditions." Survived even the legendary summer of 1816 ("Eighteen hundred and froze to death.") Most of the 7–9" ears are golden yellow but a minority are a beautiful dark maroon. MOFGA-certified. ①
A=2oz, $2.40 **B**=8oz, $9.00
C=1lb, $17.00 **D**=5lb, $80.00
E=10lb, $150.00

688FO Floriani Red Flint OG (100 days) *Z. m.* var. *rostrato* The unprecedented frenzy around Floriani seems to have died down, replaced by a steady appreciation by the cognoscenti. We finally had sufficient seed last year to meet the considerable demand, and expect to again. Credited in a *Mother Earth News* article with 20% protein content, compared to about 15% for most other varieties, Floriani's cobs are also beautiful, and they boast fabulous flavor. Their red pointed kernels (white when immature) are easy to shell and grind into a fine pinkish meal that bakes with an appealing spongy texture. Floriani's richly sweet delicious corny taste beat the competition silly in our pancake and cornbread muffin bake-off. Family heirloom brought from the Valsugana Valley of Italy by William Rubel. Once the staple polenta corn in the valley and named for Rubel's friends who've grown it there for many years. CCOF-certified. ①②
A=2oz, $2.50 **B**=8oz, $9.50 **C**=1lb, $18.00 **D**=5lb, $85.00
E=10lb, $155.00

692HB Hopi Blue (100 days) Precursors of this strain have been raised continuously for 800 years on the mesas of northern Arizona. Used by the Hopis to make ceremonial *piki* bread. Tall 9' plants produce large 8–10" ears with beautiful deep kernels easily ground into flour. Very drought-tolerant, with a long taproot. Withstood temperatures of over 100˚ and survived a June 2008 Kansas storm with winds up to 83 mph and softball-sized hail. Dick Burnham of Talking Crow Organic Farm in western Massachusetts reports it is not just for flour, it is good to eat, "crunchy, corny and wholesome." **BACK!** ③
A=2oz, $3.60 **B**=8oz, $14.00 **C**=1lb, $27.00 **D**=5lb, $130.00
E=10lb, $250.00

Garland Flint OG (105 days) We have dropped this variety for slow sales. *Not available in 2014.*

PEAS *Pisum sativum*

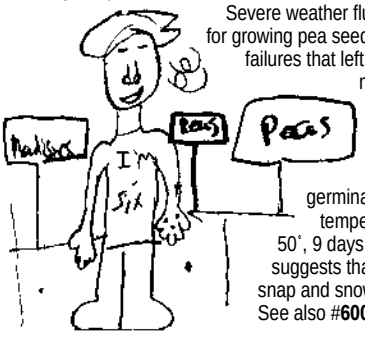
2 oz packet sows 25 ft; 1 lb, 200 ft. Avg 250 seeds/2 oz packet. All peas are open-pollinated.

Young plants are very hardy but frost stops production at the blossom or pod stage. Like cool moist weather; dislike heat, so not well adapted to southern climates where the spring heats up too quickly. Pam Dawling in Virginia has great success with #**883** Sugar Ann but cannot grow the tall longer-season #**893** Sugarsnap in her climate. For varietal advice for zones warmer than ours, we wholeheartedly recommend her new book *Sustainable Market Farming,* #**9855** in our book section.

Sow as early as ground can be worked for best yields. All peas produce more when staked; varieties over 2½' *must* be supported. Plant 8–10 seeds/ft in rows 3' apart (5' if very tall varieties). Early morning picking retards spread of powdery mildew disease and ensures best flavor. To combat the fungus, try Actinovate (**8851-2** in the supplies section).

If you love peas as much as we do, try for a second crop in the fall. Timing is crucial, as peas ripen slowly in the cool of September, and frost will halt production. We recommend planting the first two weeks of July for a fall crop in central Maine. Warmer areas try later July. If the summer is hot, cool the soil with a hay mulch in advance of planting, or shade peas with tall crops to hold in soil moisture.

Off-types continue to be a problem in conventional pea seed crops. We've noted the increasing prevalence of a tall pale-green rogue in #**732** Early Frosty, #**6003** Little Marvel and #**760** Green Arrow. Pull these plants out or consider switching to our organic productions, which have fewer off-types.



Severe weather fluctuations made 2013 a very tough year for growing pea seed crops. We apologize for the many crop failures that left gaps in our selection and we hope for a more propitious growing season in 2014.

Smooth-seeded peas germinate better in colder soils than wrinkle-seeded peas, but are not as sweet. Minimal soil temperature for pea seed germination: 40˚. Optimal range 50-75˚, optimal temperature 75˚, emergence takes 14 days at 50˚, 9 days at 59˚, only 6 days at 77˚. Pam Dawling suggests that forsythia flowering signals time to sow snap and snow peas.

See also #**6003** Little Marvel in discontinued specials.

SHELL PEAS

MEMBER SPECIAL
Offered first come, first served to Fedco Co-op members only!
See page 7 to join our cooperative with your order.
Get these peas while the supply lasts!

710CL Coral (53 days) No new crop this year. To distribute our small remaining quantity of 27.5 lb of seed we have made this into a member special. Coral makes harvesting peas before July 4th a cinch, even in cold pockets (except in clay soils after very wet springs). The best-quality early pea we've found, second only to Green Arrow in popularity. Short vines barely surpass 2' and tend to set earliest pods low. Averages 6–7 peas per pod. *Limit three packets per member.* Germs at 86%. PVP. Resists F1, PLR. ③
A=2oz, $1.50

732FR Early Frosty (60 days) Outstanding quality and sweetness, a superior variety for freezing. At its best before the pods are completely filled. Tricky to pick, but one of the easiest to shell. Holds quality for a long time after picking. Vines grow up to 3'. Susceptible to powdery mildew; performs best in early sowings. Production is dependable, often exceeding 30 lb/100 row feet. 6.26 peas per pod in 2012. First picking was June 24. Resistant to F and W. ⑤
A=2oz, $1.40 **B**=8oz, $4.20 **C**=1lb, $6.00 **D**=5lb, $20.00
E=10lb, $35.00 **K**=25lb, $70.00 **L**=50lb, $120.00

739PO Patriot OG (62 days) For a success rate as good or better than Tom Brady's (77% victories in his career), consider these Patriots that climb on only 2½' vines, yet fill the air with pea pods rather than footballs. No slogans here, no bad legislation, no uncontrolled spying on law-abiding citizens! Just copious quantities of very sweet high-quality peas that set in concentrated pickings over a short span with very few part-filled pods. 7.86 peas per pod in my first 2013 picking, well above the norm for most pea varieties. Susceptible to blossom-end rot if soil is deficient in calcium. Not the "last refuge of a scoundrel" but maybe the last refuge of a pea lover here in a year full of crop failures. *Short crop—order early!* ID-certified. ①
A=2oz, $2.20

744PR Progress #9 (62 days) Old-time favorite home-garden variety for those who want short vines, decent early production and easy picking. Even if you don't stake the 16–18" vines, you will enjoy good abundant 4" pointed dark pods with delicious flavor. Easy to tell when the peas are prime because, in the words of our trialer, this one's "a filler, not a squeezer," meaning pick when the pods are filled out. 6–9 very sweet peas per pod. ③
A=2oz, $1.30 **B**=8oz, $4.00 **C**=l1b, $6.00
D=5lb, $20.00 **E**=10lb, $35.00 **K**=25lb, $70.00
L=50lb, $120.00

Green Arrow (65 days) The pea preferred by commercial growers, scores a bulls-eye almost every time. This heavy yielder sets the standard for midseason varieties. Long pods with up to 10 peas per pod (more typically 7–8) on vines up to 3'. 6.99 peas per pod average in 2011. Seems to withstand miserable and extreme weather better than other varieties. Easy to pick because pods tend to set in pairs at the top. Tolerant to F, DM, CTV, W.
760GA Green Arrow ③
A=2oz, $1.30 **B**=8oz, $4.00 **C**=1lb, $6.00 **D**=5lb, $20.00
E=10lb, $35.00 **K**=25lb, $70.00 **L**=50lb, $120.00

761GO Green Arrow OG ID-certified. For the first time organic sales outpaced conventional as more customers heeded our advice. Our organic production has far fewer off-types than the conventional. You get what you pay for! ID-certified. ①
A=2oz, $2.00 **B**=8oz, $6.00 **C**=1lb, $10.00 **D**=5lb, $45.00
E=10lb, $80.00 **K**=25lb, $180.00

779NA Iona Petit Pois (68 days) The discriminating French palate demands smaller sweeter more tender pods and peas that are only about half the size to which we are accustomed here. Although it takes more time and trouble to pick a mess of these petit pois, the rewards are commensurate with the effort. Iona's flavor and sweetness caught Roberta's attention. A heavy yielder for a petit pois, Iona sets two and sometimes even three blunt 3" dark green pods per node, on short 24–28" vines, with exceptional sweet full pea flavor comparable in complexity to Miragreen. Our first petit pois variety, tolerant to F1,2 and PM. ③
A=2oz, $1.50 **B**=8oz, $4.50 **C**=1lb, $7.50 **D**=5lb, $25.00
E=10lb, $40.00

781LC Lincoln (70 days) With good shell pea varieties so short in this catalog, consider returning to this old English favorite that we still rate as the sweetest pea and the best for fresh garden grazing. First offered in America by J.M. Thorburn in 1908, the year before the first Lincoln penny. Vines up to 3' bear 3–3½" slender curved pods with heaviest production in mid-July. Consistently 6–8 peas per pod, 7.14 average in 2011, 6.52 in 2012 from first picking on June 27. In 2004 our 60 ft row produced an all-time record 33 lb. Lincoln loves cool rainy Julys such as 2009 but produces much less when July is hot and dry as in 2012. Susceptible to PM and other diseases so a good choice only if you can get on your ground early enough in the spring. Tolerant to W. ③
A=2oz, $1.30 **B**=8oz, $4.00 **C**=1lb, $6.00 **D**=5lb, $20.00
E=10lb, $35.00 **K**=25lb, $70.00 **L**=50lb, $120.00

788MO Mayfair OG (72 days) If I could have only one shell pea variety it would be Mayfair. We have a short crop of this outstanding selection. Bears prolific yields of double pods atop 40" vines. Large 4" pods frequently have 8–10 peas with rich sweet buttery flavor. 7.7 peas per pod in 2010's first picking. Way superior in flavor and productivity to any trial varieties we have compared it against. Developed at the New York State Agricultural Experiment Station by world pea expert Dr. Gerald A. Marx (see our 1999 catalog for a profile). Dr. Marx assembled the largest pea germplasm collection in the world and Mayfair was the best of them all. Tolerant of heat and PM. A word to the wise; *order early.* MT-certified. ① **BACK!**
A=2oz, $2.80

792AL Alderman or **Tall Telephone** (75 days) All-America winner Mr. Big got the hype, but failed to supplant this old-time favorite as our #1 tall pea. In our trial, Alderman topped Mr. Big in peas per pod, 7.65–6.94, in yield 38–28 lb per 100 row feet, and in flavor. Alderman boasts vines of 5–6' or more under fertile conditions, needs strong staking and frequent picking. Introduced by renowned pea breeder Thomas Laxton around 1891 and first sold by Burpee in 1901. Resistant to W. ③
A=2oz, $1.30 **B**=8oz, $4.00 **C**=1lb, $6.00 **D**=5lb, $20.00
E=10lb, $35.00 **K**=25lb, $70.00 **L**=50lb, $110.00

SOUP PEAS

Blue Pod Capucijners (85 days) Crop failure*; not available in 2014.*

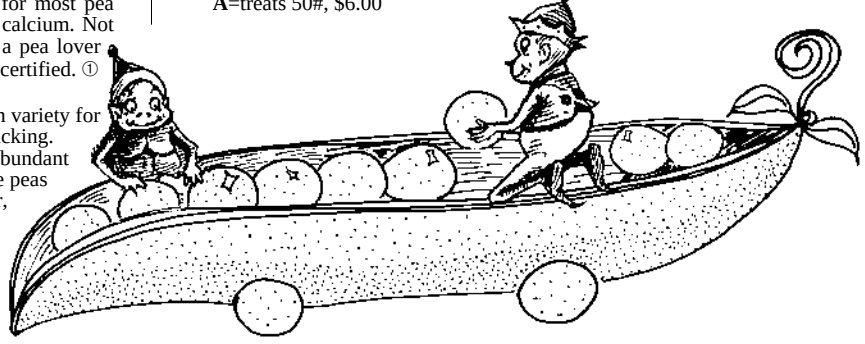
Amplissimo Viktoria (90 days) Again crop failure; *not available in 2014.*

INOCULANT

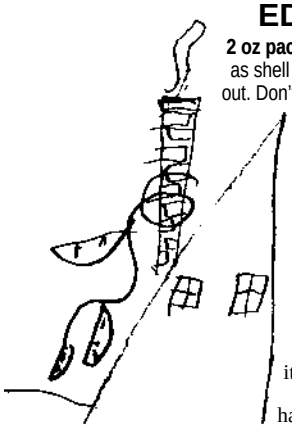
Use these item numbers if ordering inoculants with a Seed order. They can also be ordered from the Supplies section, and some other inoculants are available only in the Supplies section, page 123.

798LG Legume Inoculant for peas and beans.
A=treats 8#, $5.00 **B**=treats 50#, $6.00

799SB Soybean Inoculant for soybeans.
A=treats 50#, $6.00



EDIBLE PODDED PEAS



2 oz packet sows 25 ft. 1 lb sows 200 ft. Culture same as shell peas, except harvest snow peas before pods fill out. Don't pick snap peas too soon: snaps taste sweetest when completely filled. Young snow and snap plants can be eaten as greens, good in mesclun or lightly cooked. To serve pea shoots, remove the coarse tendrils and break the stalk into 3" pieces each with some leaves.

SNOW PEAS

Oregon Giant (60 days) This Oregon State University release bred by Dr. James Baggett is one of our two most popular snow peas. A giant selection from a giant breeder, Oregon Giant is distinguished for its sweet rich green fat wide 4–5" pods good for stir-fries, steaming, and eating out of hand. "Far and away the sweetest snow pea," avers David Nonnenmacher of Hawley, PA. Retains sweetness so may be picked a little plumper than the thin-podded varieties. We recommend staking the intermediate 3–4' vines. Resistant to PEMV, PM and F1.

818GT Oregon Giant ③
A=2oz, $1.50 **B**=8oz, $4.50 **C**=1lb, $7.00 **D**=5lb, $24.00
E=10lb, $40.00 **K**=25lb, $80.00 **L**=50lb, $150.00

819GO Oregon Giant OG ID-certified. ①
A=2oz, $2.00 **B**=8oz, $6.00 **C**=1lb, $10.00 **D**=5lb, $45.00
E=10lb, $80.00 **K**=25lb, $180.00

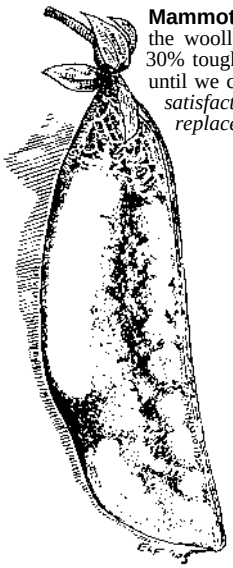
Green Beauty OG (60 days) Crop failure. Gonna have to wait another year for these beauties. *Not available in 2014.*

822BO Blizzard OG (61 days) Blizzards returned to our 2012–13 winterscape but Blizzard snow pea seeds are still in short supply. Producing this seed crop is a trial of perseverance. During our 15-year wait for its PVP to expire, it lost none of its popularity. Blizzard is still the best intermediate-vined snow pea we have ever tried. The 3–3½' vines produce an avalanche of sweet thin 3" pods in heavily concentrated sets that are easy to pick. *Order early!* OEFFA-certified. ①
A=2oz, $2.50

826SP Oregon Sugar Pod II (62 days) This short-vined snow pea from Oregon State University features 4" pods on 2–2½' vines. Difficult to pick because fruit tends to set within foliage. Good choice in sandy soils or under dry conditions. Tolerant to PM, PEMV, resistant to W. ③
A=2oz, $1.40 **B**=8oz, $4.00 **C**=1lb, $7.00 **D**=5lb, $22.00
E=10lb, $38.00 **K**=25lb, $75.00 **L**=50lb, $135.00

MEMBER SPECIAL
Offered first come, first served to Fedco Co-op members only!
See page 7 to join our cooperative with your order.
Get these peas while the supply lasts!

833MO Sumo OG (66 days) The Sumo cum laude of snow peas, much revered by Pam Dawling and us as well. As usual, we have a very short seed crop (only 20 lb), so we have designated Sumo as a member special to reward those loyal souls who join our cooperative as member-owners. Sumo is the best purple-flowered snow pea we've ever had. Its light lime-green pods are larger and fatter than Mammoth Melting Sugar's and really sweet right off the vine as well as in stir-fries. Vines grow 4–5', must be staked. Despite its name, Sumo is not from Japan but from Australia and you won't have to wrestle its abundant pods off the vine because they set high and pick readily. *Three-packet limit per member.* MOFGA-certified. ①
A=2oz, $2.60



Mammoth Melting Sugar (72 days) For 2014 as extinct as the woolly mammoth! We had numerous reports of up to 30% tough off-types in this variety. We will not offer again until we can find a reliable production. *If your crop was not satisfactory, please write for a refund, or request a free replacement packet of #**818** Oregon Giant.*

The Transformation: Winter to Spring

Sometime late March or early April,
just when it seems the snow will never disappear,
a front moves through and brings with it heavy rain.
What might have been several more feet of snow
instead removes what remains.

Once a heavy early spring rain, inches worth,
and warm, quickly melted two feet of snow.
I calculated that over a million gallons of water
traveled through just the two culverts that cross our road.

That is why it is so important to keep the ground covered,
to make sure that the little soil we have stays
even when the water sweeps across
with the change from winter to spring.

SNAP PEAS

883GO Sugar Ann OG (58 days) This 1983 Silver All-America winner from Sugarsnap breeders Gallatin Valley is very popular both with home gardeners and commercial growers. The earliest snap pea, ripening in Central Maine around June 20. Very good quality, sweetest of the dwarf snap peas. 2' vines are not as heavy-yielding as tall Sugarsnap. Use to start the season. Allow extra space between rows if you do not stake. Vermont market farmer Alan LePage makes more money on Sugar Ann than on any other pea he grows. He suggests good timing is crucial for optimal root development early in the season, the key to high yields. In 2010 he sowed on March 18! *Still has a small percentage of off-types.* Resistant to W. ID-certified. ①
A=2oz, $2.00 **B**=8oz, $6.00 **C**=1lb, $10.00 **D**=5lb, $45.00
E=10lb, $80.00 **K**=25lb, $190.00 **L**=50lb, $350.00

Sugar Lode ECO (65 days) Crop failure; *no seed available this year.*

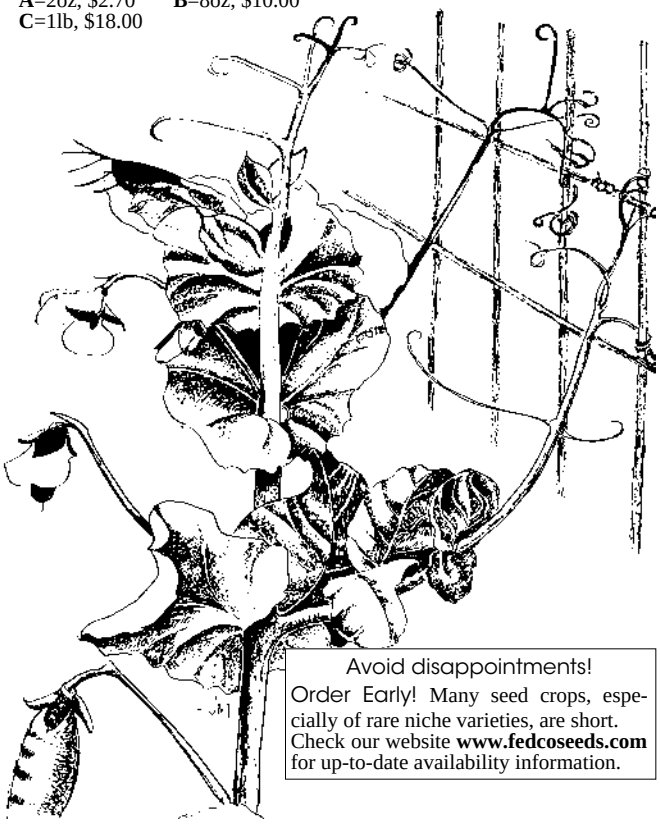
Cascadia (65 days) It's a snap to grow Cascadia. Ripening about a week later than Sugar Ann on slightly taller (2½') vines, Cascadia sends a cascade of 3" pods, longer and darker green than Ann's and equally sweet. Developed by Dr. Baggett, tolerant to PM, and the first pea bred to be resistant to PEMV.

888CA Cascadia ③
A=2oz, $1.50 **B**=8oz, $4.50 **C**=1lb, $7.00 **D**=5lb, $22.00
E=10lb, $38.00 **K**=25lb, $80.00 **L**=50lb, $150.00

889CO Cascadia OG ID-certified. ①④
A=2oz, $2.00 **B**=8oz, $6.00 **C**=1lb, $10.00 **D**=5lb, $45.00
E=10lb, $80.00 **K**=25lb, $190.00 **L**=50lb, $350.00

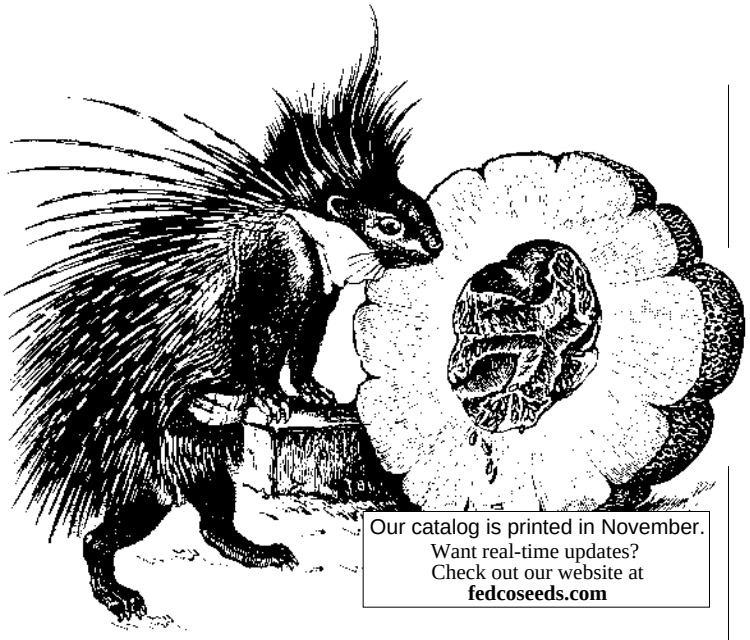
893SO Sugarsnap OG (68 days) Always a top seller, over 4,400 packets ordered last year. Awarded the coveted AAS Gold Medal in 1979 and later voted the #1 all-time AAS. One of the very best raw treats in the garden, far tastier than the dwarf varieties, although more work to grow. Tall Sugarsnap vines climb 5–7' and need strong stakes. Pods reach superb sweetness only when completely filled. Then they are incomparable. Bred by Calvin Lamborn of Gallatin Valley. This is a superior production. Resistant to W, very susceptible to PM. ID-certified. ①
A=2oz, $2.00 **B**=8oz, $6.50 **C**=1lb, $11.00 **D**=5lb, $50.00
E=10lb, $85.00 **K**=25lb, $200.00 **L**=50lb, $380.00

896OO Opal Creek OG (70 days) From a cross between the Golden Sweet snow pea and the tall Sugarsnap comes a new color for sugarsnaps! In her classic *Breed Your Own Vegetable Varieties* (**9635** in our book section) Carol Deppe tells how Kapuler created this tasty yellow snap pea, named in honor of the beautiful Opal Creek Wilderness Area in the Willamette National Forest in Oregon. Visitors to our 2011 trials in Colrain, MA, enjoyed sampling these slender yellow pods and agreed Opal is a keeper. Our harvest began July 10 from an April 30 sowing. 5–6' vines require staking. Mild and not as sweet as most sugarsnap varieties, with a silky smooth texture and a pleasantly crunchy flavor. The pods are great in salads and out of hand, best enjoyed when partially filled out rather than fully fat and tougher-textured. WA-certified. ①
A=2oz, $2.70 **B**=8oz, $10.00
C=1lb, $18.00



Avoid disappointments!

Order Early! Many seed crops, especially of rare niche varieties, are short. Check our website **www.fedcoseeds.com** for up-to-date availability information.



Our catalog is printed in November.
Want real-time updates?
Check out our website at
fedcoseeds.com

OPEN-POLLINATED MELONS

Fascinated by heritage melons? Amy Goldman's *Melons for the Passionate Grower* (ISBN 1-57965-213-1), a mouth-watering journey through her 100 favorite varieties, is an indispensable identification and cultural aid in trials work. Goldman says we routinely discard the most nourishing part of the melon: the seeds. Watermelon seeds have been an important part of African and Chinese diets. The watermelon rind, another oft-overlooked feature, makes good pickles.

Melon seed lives more than 10 years with proper storage. 18th- and 19th-century growers preferred to sow 4- to 10-year-old melon seed, believing that such seeds produced plants that spread less and fruits with a finer perfume.

Days to maturity are from date of transplanting.

Open-pollinated CANTALOUPE & MUSKMELON

Cucumis melo

1/16 oz packet, about 60 seeds, sows 20 hills. 1oz=about 960 seeds. Cantaloupes are named for the papal gardens of Cantalupo, Italy, where some historians say the first cantaloupe was grown. They are smooth-skinned or lightly netted with few ridges. Some are warted. Muskmelons are usually heavily netted and deeply ribbed with larger seed cavities than cantaloupes. Both have orange flesh unless otherwise indicated. Jason Kafka observed that deeply netted muskmelons have better flavor than those without full netting. Melons produce highest sugars when daytime temperatures exceed 80˚ and night temperatures are 60–75˚. 2012 met those conditions to a T, so it was a great melon year. Not 2013.

Minimum germination soil temperature 60˚, optimal range 75–95˚, optimal temperature 80˚, emergence takes 8 days at 68˚, only 4 days at 77˚.

908JO Jenny Lind OG (76 days) Believed to have been developed from a strain called Center originally from Armenia. Named for beloved soprano Jenny Lind (1820-1887), the Swedish Nightingale. This heirloom melon, contemporaneous with her early career, remained very popular in the New York, New Jersey, and Philadelphia area until after her death. In his 1902 catalog, famed seedsman Peter Henderson called it "the gem of the **muskmelons**, flavor unsurpassed by any." Vaughan's sold 1 lb for 85 cents in 1904. Jenny has recently enjoyed renewed popularity in home gardens all over the country. Despite her sparse spindly vines, she is a prolific bearer of small heavily netted 1 lb fruits that blush when ripe. Achieved a high Brix reading of 12.1 (12.1% sugar content) in Alice Percy's SARE-funded 2010 melon trials. Jenny may be unique among melons for having a turban on her blossom end, but tends to be too soft there for shipping. Her soft juicy lime-green interior flesh is so sweet and musky that it just might make you sing. IA-certified. ②

A=1/16oz, $2.00 **B**=1/4oz, $6.00 **C**=1/2oz, $11.00 **D**=2oz, $40.00

916KA Oka (83 days) A star for trialer Heron Breen in 2009 and 2010, outperforming many hybrids in both his greenhouse and fields, but disappointing in most recent years when cool wet conditions kept Brix levels way down. Resilient and vigorous, it recovers from transplant shock and temperature fluctuations with aplomb. A cross between green-fleshed Montreal Market melon and Banana melon, Oka was bred around 1912 by Father Athanase at La Trappe, Quebec, and offered commercially by Joseph Breck & Sons of Boston in 1924. Once feared extinct, it was rediscovered on the St. Lawrence River island of Bizard. Juicy luscious faintly aromatic slightly flattened 2–5 lb fruits—almost the cheese pumpkins of **muskmelons**. Vigorous healthy vines with large deep green leaves. Cut stems when fruits are barely ripe rather than waiting for full slip. Let them sit inside a few days and ripen fully. Adapted to Montreal and Maine, venerable and delicious. May be prone to cracking in warmer climates. All seed is held over; tests at 94% germination. *Sales have slumped so this is the last year we will offer*. Resists BW. ②

A=1/16oz, $1.70 **B**=1/4oz, $5.00 **C**=1/2oz, $8.50 **D**=1oz, $16.00

Most Years You *Can* Vine-Ripen Melons In Maine

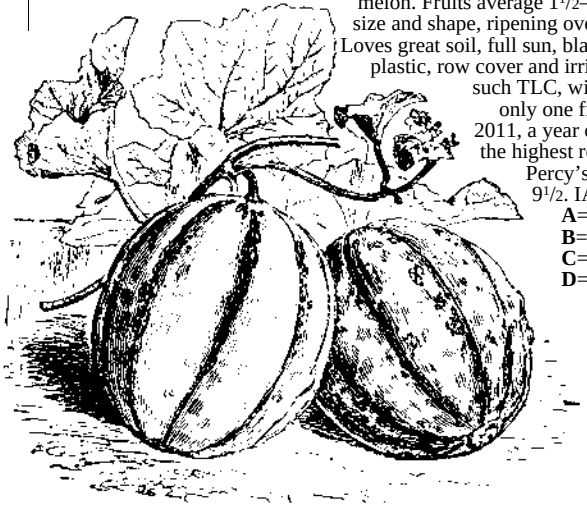
Melons are a tender crop with a high nitrogen requirement. They love heat, cannot stand frost, and may be damaged by night temperatures below 40˚. Though they require some extra fussing, the results are sure worthwhile!

- Note days to maturity and select varieties that will ripen in your climate. Diplomat, Halona, Alvaro, Blacktail Mountain, Petite Yellow, Peace and Gold Flower are surest bets.
- Start indoors in early May (later if the spring is slow to warm) in plastic or peat pots, 2 or 3 seeds to a pot. Melons resent transplanting but will take if their roots are not disturbed.
- Prepare hills in advance with liberal amounts of well-rotted manure or compost. Don't place melons next to vigorous crawling plants like cucumbers, gourds or winter squash.
- A cold start can permanently stunt growth, so wait for a warm spell after all danger of frost to transplant, usually between May 20th and June 20th. Water heavily and, if soil is dry, place a temporary hay mulch around plants until a soaking rain comes.
- Melons are much more sensitive than squashes so use low tunnels with floating row covers that do not abrade plants. If you have sandy soil, check daily and irrigate when needed.
- Use blue, black or clear plastic mulch between plants.
- Use a foliar feeding program to speed ripening.
- Remove row covers before buds open. Replace them when you don't desire any more fruit to set.
- To reduce rot loss, rotate ripening melons occasionally. To reduce mouse damage, place ripening melons on bricks.
- Inspect your patch *daily* at ripening time. Check fruits for aroma and color and *pull gently* on those that appear to be ripe. Most muskmelons are ripe when the pressure causes them to slip from the vine. Galia types are ripe when they blush yellow well before full slip. For Petit Gris de Rennes, see above; for honeydews, p. 28. For watermelons, thumping should produce a low, hollow sound. Spread thumb and forefinger and press hard on fruit. If you feel any give, watermelon is ripe.
- Enjoy an incomparable taste treat!

925GO Golden Gopher OG (85 days) "Nothing can touch the Golden Gopher," says our trialer Donna Dyrek. I concur. Again at the taste test at our 2010 Annual Meeting, Gopher was by far the best. Its heavily ribbed fruits have deep deep orange flesh of incomparable eating quality. Once achieved a Brix reading of 14 at Common Ground Fair Exhibition Hall, way ahead of any other **muskmelon** tested. Its Honeydew parentage helps account for its high sugar content as well as its resistance to F. Developed by the University of Minnesota in the 1930s, saved from probable extinction by Glenn Drowns, discovered and multiplied by our trialer Jeanne Griffin, and popularized by Jack Kertesz at the MOFGA alley-cropping demonstration garden. Called "Pop Open" melons because they sometimes split open when ripe. Very susceptible to PM. CCOF-certified. ①

A=1/16oz, $1.60 **B**=1/4oz, $4.50 **C**=1/2oz, $7.50 **D**=1oz, $14.00

930PO Petit Gris de Rennes OG (85 days) As rewarding as it is challenging to grow, as delicious as it is visually unassuming, the little grey melon of Rennes is the champagne of French heirloom melons. First noted in the garden of the Bishop of Rennes nearly 400 years ago, now maintained and intensively managed by an artisan melon cooperative in France. Its dense peachy-orange flesh "sweet, lush, juicy, aromatic, will convert anyone away from bland muskmelons. Customers fought over them," raved one blogger. Neither early, high-yielding nor easy to tell when ripe, this true **cantaloupe** without netting ripens very slowly, a golden-tan color spreading from the blossom and becoming pebbly. Cut from the vine when the blossom end is soft and the color has changed halfway up the fruit, then allow to sit until you can no longer resist its alluring perfume. Some will split and must be consumed immediately and some will be duds. Overripe, though sometimes still good, if left to slip. A delicacy, not a production melon. Fruits average 1 1/2–2 lb, variable in size and shape, ripening over a long period. Loves great soil, full sun, black or green IRT plastic, row cover and irrigation. Without such TLC, will probably give only one fruit per plant. In 2011, a year of low Brix, had the highest readings in Alice Percy's trial, averaging 9 1/2. IA-certified. ②



A=1/16oz, $2.00
B=1/4oz, $6.00
C=1/2oz, $11.00
D=1oz, $20.00

940DL Delicious 51 (88 days) Some consider Delicious 51 to be the best widely available open-pollinated **muskmelon** for cold climates. One trialer compared its flavor to fine sorbet. Distinctively ribbed with sparse netting, its sweet 3 lb fruits turn yellow and are sometimes soft when ripe. Dark orange interiors with sweet juicy aromatic flesh. Received 11 Brix reading at 2005 Oregon State University trials. Developed by Dr. Henry Munger of Cornell University in 1953. Resists F, PM. ②

A=1/16oz, $1.10 **B**=1/4oz, $2.00 **C**=1/2oz, $3.50 **D**=1lb, $23.00

943FO Prescott Fond Blanc OG (88 days) *Fond Blanc* translates to 'white bottom.' Don't be fooled by the outer appearance of this wrinkled bumpy warted thick-skinned puffy-looking grey-green rock melon! (One author describes the skin as "tough as rhinoceros hide.") Looks like spumoni on the inside, the layers of green and yellow rind giving way to deep orange flesh in the center. Then oo-la-la! Sniff its rich bouquet and bite into the juicy melting dense savory flesh. As Prescott's 3–5 lb true **cantaloupes** ripen they develop a yellow blush and a floral redolence, and finally slip off the vine with light pressure when fully ripe. Bring them in and let them sit for a week, then enjoy! Fruits ripen variably, vines keep producing, averaging about four melons per hill. IA-certified. ②

A=1/16oz, $2.00 **B**=1/4oz, $6.00 **C**=1/2oz, $11.00 **D**=1oz, $20.00

945RF Rocky Ford Green Flesh (90 days) A few years ago we lined up several green **muskmelons** in the same class, including Green Nutmeg, Eden's Gem, Netted Gem and Rocky Ford to go melono a melono for top honors. Rocky was the clear taste winner and replaced its grandfather Green Nutmeg. Developed by J.W. Eastwood in 1881 and named after the town that was the heart of the thriving Colorado melon industry and still is the headquarters of our favorite cucurbit supplier, Hollar. Rocky's vigorous vines produce 3–4 round heavily netted aromatic 2 lb fruits per plant. Fruits are ripe when they slip off. Their fine-grained juicy sweet green spicy flesh has a pleasant smooth texture with a lingering muskiness. A good home-garden variety and short-distance shipper. All seed is held over; testing at 92% germ. ②

A=1/16oz, $1.10 **B**=1/4oz, $2.00 **C**=1/2oz, $3.50 **D**=1lb, $23.00

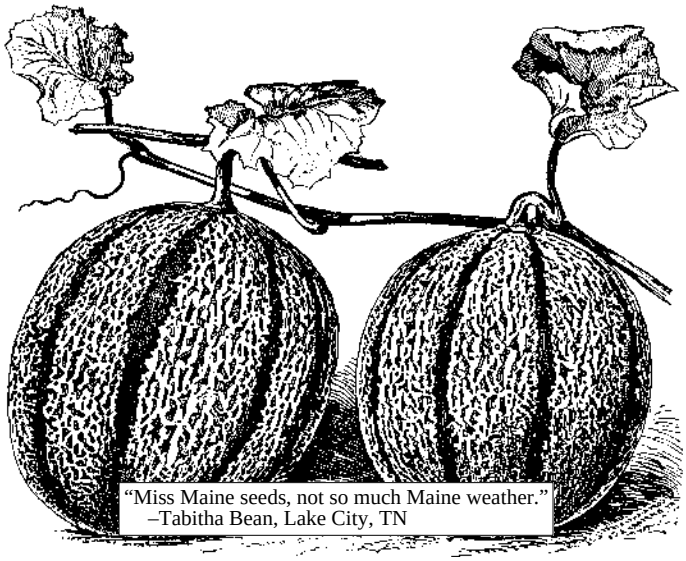
946PW Pride of Wisconsin (90 days) Welcome to melon nirvana, that rare moment of absolute perfection: the smooth texture and juicy refreshing sweetness that satisfy through and through with just the right delicate balance and no musky aftertaste. Move over, Minnesota! Pride takes its place alongside Golden Gopher as the best. Extremely high-quality large oval salmon-fleshed 5–7 lb fruits have coarse netting and compact seed cavities. Edible all the way to the rind. Tends to crack at the blossom end during wet seasons. Not recommended for long-distance shipping. Known as Queen of Colorado when it was introduced in 1923 by the St. Louis Seed Co, good enough to have been claimed by more than one state. Widely offered in the '40s and '50s by the likes of Burpee and Eastern States Cooperative. All but disappeared from the trade after the onset of hybridization, maintained by just a handful of seed savers. "Thanks for bringing back Pride of Wisconsin—I have missed it all these years," said Caroline Ives of Hinesburg, VT. ①②

A=1/16oz, $1.60 **B**=1/4oz, $5.00 **C**=1/2oz, $8.50 **D**=1oz, $16.00

Open-pollinated CRENSHAW MELON *C. m.*

950SF Sweet Freckles ECO (89 days) Earlier, smaller and more flavorful than Burpee's Early Crenshaw. Heron likens its flavor to that of an Indian dessert. Pear-shaped Freckles ripens from green to cream-yellow or light peach with dark greenish-orange splotches that give it its name. Harvest at full slip and allow to finish ripening indoors until its fragrance calls. Enjoy the creamy texture and perfumed flavor of its light peachy-beige flesh. Fruits averaged 2.2 lb topping out at 3.25. Can grow larger in warmer climates. Requires green or black plastic and row covers to approach its potential yield of 4 fruits per plant in our zone. Susceptible to PM; do not set out adjacent to other squash. All seed is held over with an 84% germ. ①

A=1/16oz, $1.60 **B**=1/4oz, $5.00 **C**=1/2oz, $8.50 **D**=1oz, $16.00



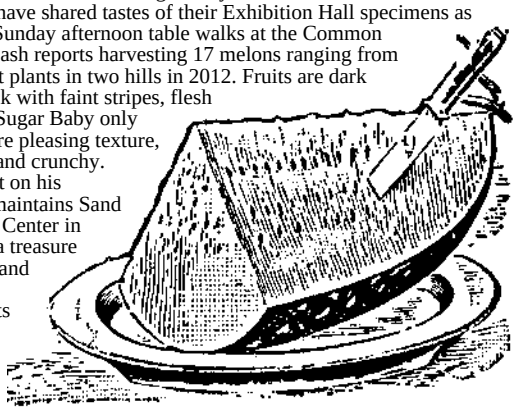
"Miss Maine seeds, not so much Maine weather."
–Tabitha Bean, Lake City, TN

Open-pollinated WATERMELON *Citrullus lanatus*

1/16 oz packet, about 40 seeds, sows 14 hills. 1 oz=about 670 seeds. Agricultural Research Service scientists have discovered that watermelon, known to contain large amounts of the antioxidant lycopene, is also an excellent source of the amino acid citrulline that is important for wound healing, cell division and removing toxins from the body. More than 4 billion pounds of watermelons are produced annually in the United States.

Minimum germination temperature 60˚, optimal range 75–95˚, optimal temp. 90˚, emergence takes 12 days at 68˚, 5 days at 77˚, only 17% normal seedlings at 59˚, 94% at 68˚.

954BO Blacktail Mountain OG (71 days) At age 17 cucurbit aficionado and future eminent seedsman Glenn Drowns took on his 4-year project to breed a watermelon that would withstand the rigors of his mountainous northern Idaho climate and ripen before first frost despite summer nighttime temperatures that averaged 43˚. No wonder Blacktail Mountain is the earliest variety extant, among the hardiest, best adapted to a variety of conditions, and even stores after harvest as long as any. Thanks to Adam Tomash and June Zellers who have shared tastes of their Exhibition Hall specimens as highlights of our Sunday afternoon table walks at the Common Ground Fair. Tomash reports harvesting 17 melons ranging from 4–15 lb from eight plants in two hills in 2012. Fruits are dark green, almost black with faint stripes, flesh orange-red like a Sugar Baby only with a cleaner more pleasing texture, very sweet, juicy and crunchy. Drowns didn't rest on his laurels—he now maintains Sand Hill Preser-vation Center in Iowa, his catalog a treasure trove of rare seed and poultry varieties. Heldover seed tests at 90% germ. ID-certified. ①



A=1/16oz, $2.30
B=1/4oz, $9.00
C=1/2oz, $15.00
D=2oz, $50.00

957MO Early Moonbeam OG (78 days) A selection from Yellow Doll, one of breeder Alan Kapuler's notable successes in de-hybridizing hybrids. Kapuler retained most of Doll's strengths including earliness, icebox size (5–8 lb), sweet yellow flesh and colorful skin of dark green stripes on a greenish-white background, while sacrificing only a scintilla of uniformity and flavor. Brix reading of 9.9 at Washington State University (WSU) trials. Moonbeam is a stabilized variety so you can save your own seed. All seed is held over; tests at 75% germination. QCS-certified. ①

A=1/16oz, $1.60 **B**=1/4oz, $4.50 **C**=1/2oz, $7.50 **D**=1oz, $14.00

963SO Sugar Baby OG (80 days) The first of its genre and still the standard northern icebox watermelon. Among the earliest in its class, Sugar Baby grows 8–10 lb fruits, dark green outside and deep red inside. Discovered in a field of picnic watermelons by M. Hardin of Geary, OK, in 1955 and introduced by the Woodside Seed Co. Still prized by those who prefer their watermelons open-pollinated and of modest size, although its flesh quality is grainier than the pricey mini-melons featured in supermarkets. All three lots of seed were held over, all testing at 80% or better. OT-certified. ③④

A=1/16oz, $1.20 **B**=1/4oz, $2.60 **C**=1/2oz, $5.00 **D**=1lb, $56.00

968CS Cream of Saskatchewan (80 days) Those who partook of the Cream during my Sunday table walk at the 2010 CGCF experienced the full potential of this variety's sweet bliss when grown in a good season. "Of all the cool climate melons I've grown in Oregon, Maine and Wisconsin, this takes the cake, not just sweet but real character and flavor." With his background in cucurbits, plant breeder John Navazio knows a good melon when he tastes one. He gave me my first taste many years ago and I've prized these sweet juicy melons with cream-colored flesh and abundant seeds ever since. Sweet and cooling on a hot day, these round 6–10 lb fruits are light green with dark stripes with thin brittle skin prone to split. Heirloom said to have originated in the Ukraine, brought to Saskatchewan by immigrants early in the 20th century. ①③

A=1/16oz, $1.60 **B**=1/4oz, $5.00 **C**=1/2oz, $8.50 **D**=1oz, $16.00

Basic Definitions

Open-pollinated varieties will grow true to type when randomly mated within their own variety. Provided your plants have been properly isolated from different varieties of the same species, seed saved from these plants will breed true.

Hybrid varieties are those produced from the crossing of two different inbred lines. *Seed saved from hybrid varieties will not breed true in the next generation.*

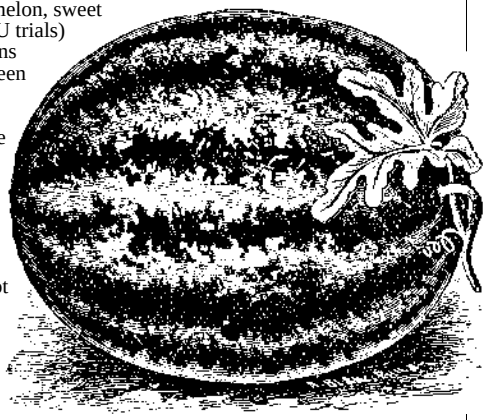
Amongst **open-pollinated** plants, **self-pollinated** (selfers) usually reproduce by using their own pollen. **Crossers** usually reproduce through the transfer of pollen from one plant to a different plant of the same species.

Botanical nomenclature goes from the general to the specific. Plants are classified into kinds by **genus**, **species** and **variety**. In *Cucurbita pepo* Sweet Dumpling, *Cucurbita* is the genus, *pepo* is the species and Sweet Dumpling is the variety.

974DO Sweet Dakota Rose OG (82 days) Thirty years ago David Podoll (of Dakota Dessert Squash fame, see **1630**) crossed the small early-maturing Early Canada with the enormous late-maturing Black Diamond to create this intermediate 8–12 lb delight, skin light green with dark green stripes. A star in my 2007 trials, it matured early and produced 2–3 fruits per plant. One of the sweetest open-pollinated watermelons we know, it has a thin skin, few seeds and stores longer than most others. A strong watermelon flavor complements its sugar rush. ICS -certified. ①

A=1/16oz, $2.00 **B**=1/4oz, $6.00 **C**=1/2oz, $11.00 **D**=2oz, $34.00

980QZ Quetzali (85 days) An outstanding open-pollinated red watermelon, sweet (tested 9.7% sugars at WSU trials) with some substance. Ripens 9–12 lb fruits with dark-green skin splotched with lime-green sponge prints. Even more attractive on the inside where the dense pink flesh is almost seedless! *Caution: Requires a sharp knife, strong wrist and sure stroke to cut open its skin.* Resists ANTH1. We cannot ship to South Carolina. PVP. ⑤



A=1/16oz, $1.70
B=1/4oz, $4.80
C=1/2oz, $7.50
D=2oz, $20.00

984SW Sunsweet (85 days) Though it loves warm locales, Sunsweet is adapted almost anywhere. Our melon trialers in central Maine have harvested two 20 lb fruits per plant. They report it outproduces hybrid Sweet Favorite and is earlier and bigger than hybrid Sangria. We recommend this large oval open-pollinated watermelon for glorious red sweet juicy delectable treats. Skin dark green with broken light green stripes. Resistant to ANTH and F. No sales to South Carolina. PVP. ⑤

A=1/16oz, $1.70 **B**=1/4oz, $4.80 **C**=1/2oz, $7.50 **D**=2oz, $20.00

Verona (86 days) *Not available in 2014.*

989CO Crimson Sweet OG (90 days) For growers in climates warm enough to grow a 25 lb watermelon. This almost round 10x12" light green melon with bold dark green stripes has defined good watermelon eating since 1964 when it was developed by Dr. C.V. Hall of Kansas State U. Noteworthy for its crisp dark red very sweet flesh. Tolerance to ANTH1 and ANTH3 and F1 and F2 and a thick skin suitable for shipping make it a commercial favorite in the Middle Atlantic states and the Southeast. Vigorous vines. 9.9% Brix at WSU trials. 1978 AAS winner. *Caution: Not adapted to cold northern areas.* CCOF-certified. ③

A=1/16oz, $1.20 **B**=1/4oz, $3.00 **C**=1/2oz, $5.50 **D**=1lb, $60.00

991GO Orangeglo OG (90 days) The most orange of watermelons, much favored by Glenn Drowns. Like us, Drowns enjoys convincing people to try new things. Orangeglo was one of his big triumphs at farmers market. When he took them for the first time, some folks even refused his free samples. The next week people were waiting in line. Not the sweetest of our melons, however its crisp tender bright orange flesh is juicy and refreshing with an almost tropical flavor. Well adapted to the Northeast and every bit as good as Drowns promised, the striped oblong melons average 10 lb. and often achieve 15 lb. We admired a huge blue-ribbon specimen exhibited by Rachel Katz at the 2012 CGCF that she contended (and we agreed) should have received a Judges Award. Let them stay in the field an extra few days when the stem is drying because they reach full sweetness only when completely ripe. Large, plentiful seeds. WSU Brix rating of 10.7%. All seed held over; tests at 86%. QCS-certified. ①

A=1/16oz, $2.00 **B**=1/4oz, $5.50 **C**=1/2oz, $10.00 **D**=1oz, $17.00

992MO Moon and Stars OG (100 days) Once feared extinct, this now-famous unique watermelon became a cause célèbre for the Seed Savers Exchange. Released by Peter Henderson & Co. as Sun, Moon and Stars in 1926, it was popular in the '30s before fading into obscurity for almost fifty years. Seed Savers Exchange co-founder Kent Whealy found it again in 1981 after a four-year search and his son Aaron supplied us with our original seed. Because it needs a lot of heat to set fruit, it poses a challenge worthy of the Maine melon-grower's mettle. No one would rank 2013 as a great year for growing melons, but some noble specimens of this variety adorned the Common Ground Fair Exhibition Hall. Dark green skin has beautiful yellow spots which range in size from little peas (the stars) to a silver dollar or larger (the moon). Spotted foliage, actually a product of a virus found in the breeding lines, looks unhealthy to the uninitiated. Sweet (9.7% Brix) somewhat grainy pink flesh, and such a looker! MOSA-certified. ②

A=1/16oz, $1.60 **B**=1/4oz, $5.00
C=1/2oz, $9.00 **D**=2oz, $25.00

HYBRID MELONS

Hybrid CANTALOUPE & MUSKMELON *C. m.*

1 gram packet, about 20 seeds, sows 7 hills.

1035HL Halona (74 days) The earliest **muskmelon** to vine-ripen for me—Aug. 11 in the very warm 2012 season. A full zone farther north, Alice Percy outdid me, beginning her harvest of 19 fruits from four plants on Aug. 3. Most of hers ripened by the middle of the month. Halona is dependable, early and easy to grow even for the melon-challenged, delivering extraordinary sweetness and muskiness that pleases most eaters. Enjoys a broad range of geographic adaptation. Julie and Joel Wolpert of Belington, WV, pulled 1–3 melons any time they chose to look from 4–5 plants each of Halona and #**925** Golden Gopher. The combo "thrilled their three-year-old for weeks on end," the seasons for these two varieties lining up perfectly. Achieved a 3.4 taste rating out of a possible 4 in Alice's trial. The 6" oval fruits averaged 2.8 lb for Alice and 3.0 for me, boasting small seed cavities around thick sweet orange flesh. Alice's tested at 9.4 Brix, but it has recorded as high as 14–15 in other trials. Tolerant to some F strains, resistant to PM. ②

A=1g, $2.20 **B**=3g, $5.80 **C**=15g, $26.00

1046TH Athena (80 days) This **muskmelon** ripens early with nice orange interior color, good sweetness and not a hint of muskiness. Oval-round well-netted lightly ribbed fruits average 2 1/2–4 lb. An excellent shipper, recommended for commercial growers. 11.0 Brix at 2005 OSU trials. Second-best yielder among 10 melons in 2002 University of Maine trial. Performed well for Jason Kafka in drought conditions. "Finished really well with few culls," he reported. No sales to South Carolina. Tolerant to F0,1,2 and PM1,2. ⑤

A=1g, $2.80 **B**=3g, $8.00 **C**=15g, $36.00

1049HC Hannah's Choice (85 days) Rated "clearly…superior" by experienced melon growers Adam Tomash and June Zellers of West Gardiner, ME, who produced 22 fruits from 2 hills in 2007, 20 of them marketable. In Colrain, MA, my first melon from a late-May direct-seeding in 2012 ripened Sept 1. If I could grow only one **muskmelon** variety, Hannah would be my hands-down choice, for ease, appearance, and above all, flavor. Further north, in Zone 4, its eating quality has been more variable. Nikos, our trials manager, likens its flavor to the tropical fruit cherimoya "custard apple" —smooth, perfumy, juicy with syrupy sweetness. The 6 1/2 x 5 1/2" large netted oval fruits average 3–5 lb (3.3 for me in 2012) with a high Brix rating of 13. As stunning on the inside as it is imposing on the outside, its rich green rind contrasts with the deep orange flesh. Kudos to the Cornell University breeding program for developing this gourmet melon. At trials in both Freeville and Jamesport, NY, it had an astonishing 96% marketable fruits by weight besting Delicious 51, Earliqueen, Athena and Burpee Hybrid in color, depth, Brix and over-all quality. Resistant to PM, tolerant to F2, ZYMV, PRSV, WMV. ②

A=1g, $2.40 **B**=3g, $6.50 **C**=15g, $32.00

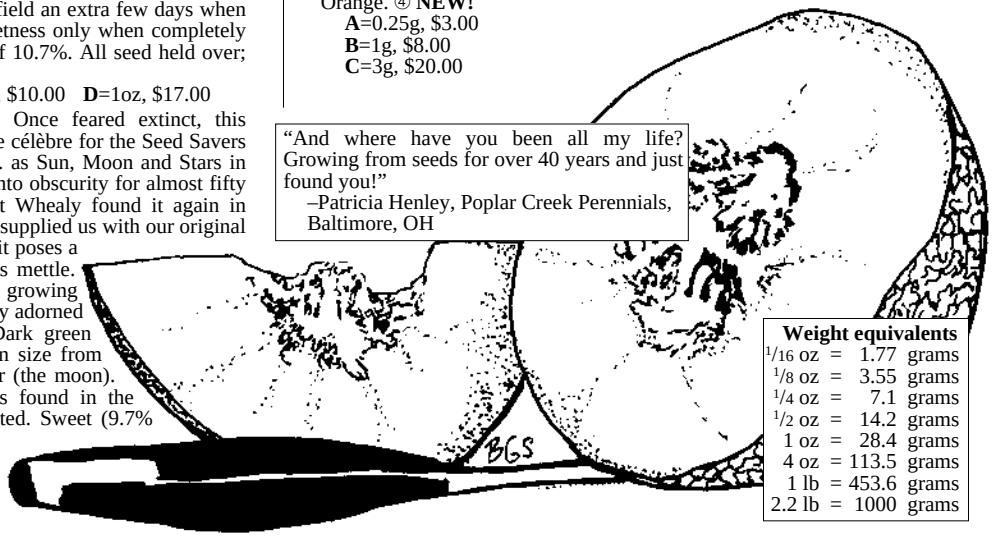
Hybrid CHARENTAIS MELON *C. m.*

1/4 gram packet, about 9 seeds, sows 3 hills. This French melon is a true cantaloupe, almost smooth with no netting. Green skins blush yellow-tan when ripe, fruits emit a memorable redolence. Harvest at half-slip and bring inside for a day for best flavor.

1052AV Alvaro (72 days) Heron calls Alvaro the Halona of Charentais melons. He harvested his first on Aug. 21 from a June 12 transplanting, same time as Halona. We've searched years to fill this niche, as Charentais is a class of melon notoriously slow to ripen and difficult to harvest unsplit yet perfectly ripe. Not Alvaro, which is very early and forgiving about picking time. Even in this water-bursting year, not one split. Uniform 5x6" fruits average 3 lb and fill the room with that incomparable Charentais aroma. Thick orange flesh with silky but firm texture and rich full-bodied flavor, everything we've wanted in a Charentais but not found since French Orange. ④ **NEW!**

A=0.25g, $3.00
B=1g, $8.00
C=3g, $20.00

"And where have you been all my life? Growing from seeds for over 40 years and just found you!"
–Patricia Henley, Poplar Creek Perennials, Baltimore, OH



Weight equivalents		
1/16 oz	=	1.77 grams
1/8 oz	=	3.55 grams
1/4 oz	=	7.1 grams
1/2 oz	=	14.2 grams
1 oz	=	28.4 grams
4 oz	=	113.5 grams
1 lb	=	453.6 grams
2.2 lb	=	1000 grams

Hybrid GALIA-TYPE MELON *C. m.*

1 gram packet, about 20 seeds, sows 7 hills. The name Galia is the feminine form of the Israeli name *Gal* (meaning 'wave'). Developed in Israel around 1970 by breeder Zvi Karchi, Galias feature smooth lime-green flesh and a sweet taste with tropical overtones. Typically the fruits have corky netting but no ribbing. Pull from the vine when the skin blushes yellow.

1055DP Diplomat (76 days) Vine-ripening Galia melons in the North and discerning just when to bring them in used to be a challenge comparable to making good diplomacy in the Middle East. While the latter remains intractable, Hollar mastered the former with this Diplomat. These 5+ lb fruits are early, fragrant and sweet all the way down to the rind. The two I harvested on the last day of August 2012 were delectable. Diplomat is easy to grow and easy to tell ripeness. It blushes yellow and slips off the vine. Enjoy this incomparable green-fleshed treat. Replaced Passport. Who needs a Passport when you have a Diplomat? Tolerates PM. ②

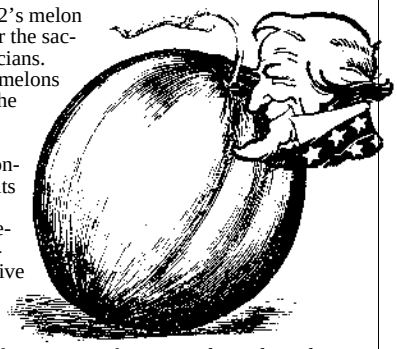
A=1g, $2.00 **B**=3g, $5.00 **C**=15g, $22.00

1059AO Arava OG (80 days) Some years back, during a spring trip to Israel, I visited Genesis Seeds, the producers of this stellar green-fleshed melon that is named for the long valley that traverses much of the desolate Negev Desert in southern Israel. Though it is hard to believe that anything will grow in such a place, these Arava melons are the signature Israeli variety found in all the markets. A necessity there at the edge of the desert, where stepping outside mid-morning in April feels like entering a blast furnace. Unsurprisingly, I developed quite a taste for these sweet refreshing fragrant **cantaloupes.** Smooth, no ridges, lightly netted, blemish-free and uniform. In 2012, Alice Percy harvested 12 fruits from four plants, averaging 1.56 lb each. Will grow larger in a warmer climate. Tested 10.9 Brix for her. Resistant to PM. AGRIOR-certified. ③

A=1g, $2.00 **B**=3g, $5.00 **C**=15g, $22.00

Hybrid HONEYDEW *C. m.*

As with watermelons, discerning ripeness in honeydews is an art. At least two or three of the following signs should align before you cut fruit from the vine: 1) Fruits are free of fuzz or minute hairs that denote immaturity. 2) As with watermelons, stems dry at tendrils. 3) Fruits assume proper coloration (different for different varieties). 4) Light firm pressure applied to fruit bottom results in a slight give or rubbery rebound (pick soon). Give extends into the curve outside of the blossom scar (pick now). Do not wait for full slip—fruits will develop cracks and get over-ripe. Cure 1–4 days off the vine for best flavor, until it develops a very subtle sweet smell of perfumed honey indicative of melting juicy full-flavored flesh.



1088US Uncle Sam (78 days) 2012's melon harvest revealed a perfect antidote for the saccharine promises of competing politicians. Uncle Sam was among the very first melons I picked in early August, and by far the largest. Weighing up to 4 lb, with an alluring yellow wash over the white base, perfumed extravagantly, this honeydew begged to be shared. Besides its solid musk and deep orange flesh, Uncle Sam combines a great muskmelon texture and flavor with the sweetness of a honeydew. Healthy productive disease-resistant plants. Among a crew that gave Sam a high 4.1 taste rating, staffer Rob Lemire said, "I just cannot stop eating it!" Trialer Alice Percy, whose nine fruits from four plants averaged 3.2 lb and achieved an astonishing 13.9 Brix average, used capital letters in her demand that we list it. To paraphrase Alice and that famous pointed-finger slogan, "You want Uncle Sam!" Somewhat prone to cracking. Resistant to F0-2 and PM. Web special last year, **NEW!** in the catalog. ④

A=1g, $2.60 **B**=3g, $7.50 **C**=15g, $33.00

1091HN Orange Honey (78 days) This honey of a melon from China will mature in much of our sales area. Features oval-round melons whose yellow skins turn full bright orange at ripeness. They average 3 lb, although they can get bigger in a good year. Not all ripen in Maine, but the plants are very productive, and excel in good years and warmer climes. Our trialer Heron Breen describes their light orange flesh as crunchy crisp with an "orange popsicle flavor not frozen." Plenty sweet and satisfying right down to the rind. All our seed is held over; tested at 87% germination. ③

A=1g, $1.60 **B**=3g, $4.20 **C**=15g, $16.00

1093WH White Honey (80 days) Sniffing melons again? White Honey's addictive perfume will encourage this harmless and legal habit. The pearly, almost translucent flesh of these juicy melons has an attractive sweetness with a slight floral undertone. Heron's earliest and most productive melon in 2010, (under row cover and with both black plastic and irrigation, his harvest began August 15) and the very first among 20 varieties to ripen for Alice Percy, her first two in 2012 on July 29. From four plants Percy harvested 20 of the oblong/oval melons over a long window. Fruits average 2.1 lb and received a high taste rating of 3.8 out of 4. Ripe when the skin turns from white to deep ivory, keep well for at least five days off the vine. All our seed is held over; germinated at 88%. ③

A=1g, $1.60 **B**=3g, $4.20 **C**=15g, $16.00

Yellow Honey (85 days) *Not available in 2014.*

Hybrid SPECIALTY MELON *C. m.*

1099SS Sensation (85 days) At a late August melon tasting, on one end of the table posed a single-serving delight with few equals, Seminis-bred French Orange. Opposite end, down a far stretch of other melons sat a large glowing Sensation. When the cutting was done, all participants were clustered around the Sensation, sharing, expounding, enjoying its sugary bounty. Forgotten was the gold standard of the past, crowned was the new Sensation, very sweet, but not cloying, complex with haunting hints of hazelnut, amaretto and cinnamon. While very unlike French Orange, and not fitting into any of the usual classes of melons, Hollar's Sensation, with its glistening white flesh, takes the best parts from them all. In 2012 trialer Alice Percy harvested seven of these prolific sparsely netted 2–4 lb fruits, most from Aug. 24–28. As they ripen, their green skin becomes burnished with an orangey-yellow haze and they slip from the vine. Resistant to F0-2 and PM. ②

A=1g, $2.00 **B**=3g, $5.50 **C**=15g, $25.00

Hybrid WATERMELON *Citrullus lanatus*

1 gram packet, about 20 seeds, sows 7 hills.

1114PY Petite Yellow (75 days) Petite Yellow is our choice to compete with the Bambino and PureHeart minimelons all the rage in supermarkets. Jason Kafka praises it for its "outstanding shape and size from grower to purchaser…they pack into a box remarkably well." Light green with narrow dark green stripes and little more than half the size of Peace, these 4–5 lb yellow-fleshed cuties make perfect ready-to-go one-meal melons, sweet, juicy, with flavor and texture to please and very few seeds to interfere. Commercial growers also like its tough skin that resists cracking and permits long-distance shipping. "Now our customers' favorite," concludes Janine Welsby of Wellsville, OH. ③

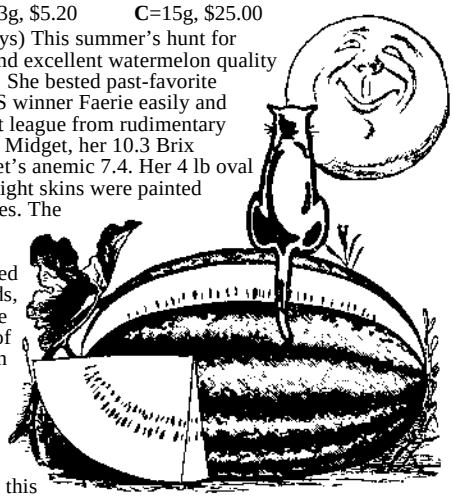
A=1g, $2.00 **B**=3g, $5.50 **C**=15g, $26.00

1119PC Peace (75 days) "I gave Peace a chance and was rewarded with loads of sweet little melons," wrote Welsby. Coming in around 8 lb, Peace surpasses Yellow Doll in flavor, texture and sweetness. Its yellow flesh has that kind of drizzle-down-your chin juiciness that thoroughly satisfies on a hot late-summer day. Light green skin with narrow dark green stripes. ③

A=1g, $2.00 **B**=3g, $5.60 **C**=15g, $26.00

1122GF Gold Flower (75 days) "These are my 5-star melons," says Kafka. In an August 2013 taste test I loved their complex sweet butterscotchy flavor that rated a 10.4 Brix at WSU. The Petite Yellow I tasted alongside seemed sweet but one-dimensional by comparison. Heron picked his first ripe fruit in 2010 on Aug. 6, a dozen days earlier than 2009. From mainland China, these 7x14" torpedo-shaped melons carry a payload of rich sweet flavor as their interior flesh ripens from yellow to orange. Thin dark green skins with black snakeskin markings resemble a dwarfed Giant Rattlesnake melon. Sets 4–6 fruits per plant, best picked before the tendrils totally wither, stored in a cool room for 24 hours before marketing, or 36–48 hours before eating. So early and productive, could benefit from a second succession planting. ③

A=1g, $1.80 **B**=3g, $5.20 **C**=15g, $25.00



1126DN Diana (76 days) This summer's hunt for yellow-skinned luster and excellent watermelon quality showed Diana supreme. She bested past-favorite Golden Crown and AAS winner Faerie easily and was in a whole different league from rudimentary open-pollinated Golden Midget, her 10.3 Brix reading dwarfing Midget's anemic 7.4. Her 4 lb oval melons look as if their light skins were painted with bright yellow stripes. The crunchy texture and complex flavor of her sweet red flesh, unmarred by the small sparse seeds, won over our warehouse staff. Her productivity of 6 fruits from two hills in this poor melon year was also noteworthy. Well named, shining with golden moonlight and definitely more divine than any other in this unique class. **NEW!** ③

A=0.5g, $2.00 **B**=1g, $3.80 **C**=5g, $14.00

1130OR Orange Orchid (78 days) Maybe you've read our well-justified raves about #**991** Orangeglo but have been unwilling or unable to wait out its long 90-day season or cope with its formidable size. Hybrid Orange Orchid can either offer an alternative or whet your appetite for that end-of-season pleaser. Orchid provides early reliable production in a smaller more marketable 6-pound oblong package. "Double-O" brought us bright flesh color, crisp texture and super sweet floral flavor without any hint of the internal hollow heart that can plague orange-fleshed watermelons. "Wonderful. Best yet," said one happy staff taster. Medium light green rind with dark green striping. Ripened Aug. 29 for Heron Breen from a late June 12 transplanting. Most years could be set out earlier and would bear significantly sooner. **NEW!** ③

A=1g, $1.80 **B**=3g, $5.20 **C**=15g, $24.00

1168DS Dark Star (83 days) "Much better than Jade Star or Blacktail Mountain," says Welsby who harvested several in the 15 lb range. Our trialers agree, rating it as having larger size, darker red interior flesh and substantially better flavor than Seminis/Monsanto's Jade Star. Dark's high-yielding dark glossy round 10–15 lb fruits feature crisp bright juicy flesh, sweet right down to the rind, and small black unobtrusive seeds. Donna Dyrek's first fruit ripened Sept. 1 in 2010. ②③

A=1g, $1.80 **B**=3g, $4.50 **C**=15g, $18.00

1176SF Sweet Favorite (86 days) 1978 AAS from Sakata. One of the best oblong watermelons for the North. Consistently produces 10–13 lb fruits with sweet bright red flesh. Green skin with dark stripes. Margaret Liebman of Southpaw Farm in Unity, ME, grew some 20-pounders this year. In Ohio, Janine Welsby set a personal record with a 28.5 lb melon in 2011 and harvested over 300 lb of melons from 9 plants. "So sweet and juicy," she raved. Brix rating of 10.5 at WSU. Tolerant to ANTH and F. ⑤

A=1g, $1.80 **B**=3g, $5.20 **C**=15g, $24.00

1188SG Sangria (88 days) The sweetest (as much as 12–14% sugars in some tests) juiciest watermelon in our trials. These elongated ovals average 10–12 lb with dark green skin broken by light green stripes. Bright refined red flesh will satisfy the most avid sugar seekers. Sangria, the first hybrid Allsweet type ever developed, has been a big hit on the market. Cannot ship to South Carolina. Tolerant to some races of ANTH and F. *Caution: May not ripen in northern areas with insufficient heat to grow big watermelons.* ⑤

A=1g, $2.50 **B**=3g, $6.50 **C**=15g, $32.00

CUCUMBERS *Cucumis sativus*

1/16 oz packet sows 11 ft; 1 oz, about 180 ft. 1/16 oz packet avg. 65 seeds. Very tender, will not survive frost. Sow 2" apart in rows 3' apart or 6 per mound in hills 4' apart thinning to 3 best plants. Combat striped cucumber beetles by handpicking early AM when the dew makes them sluggish, or use floating row covers, removing when cukes flower. Pick frequently for best production.

Anne Elder reminds us that cucumbers turn bitter when they get thirsty. She turns on the drip line each day after her CSA picks.

Using compost in conjunction with row covers (rather than either alone) increased cucumber yields at the University of Michigan.

Possibly the most ancient of all vegetables. Cucumber seeds found in the Spirit Cave along the Burma/Thailand border in 1970 carbon-dated back nearly 12,000 years.

Parthenocarpic varieties (**1239**, **1392**) can set fruit without being pollinated, an advantage in cold cloudy summers. Gynoecious varieties (**1232**) produce almost exclusively female flowers for uniformity and high yields.

Days to maturity are from direct seeding, except where noted**.**

Minimum germination temperature 60˚, optimal range 65–95˚, optimal temperature 90˚, emergence takes 13 days at 59˚, 6 days at 68˚, 4 days at 77˚.

PICKLING

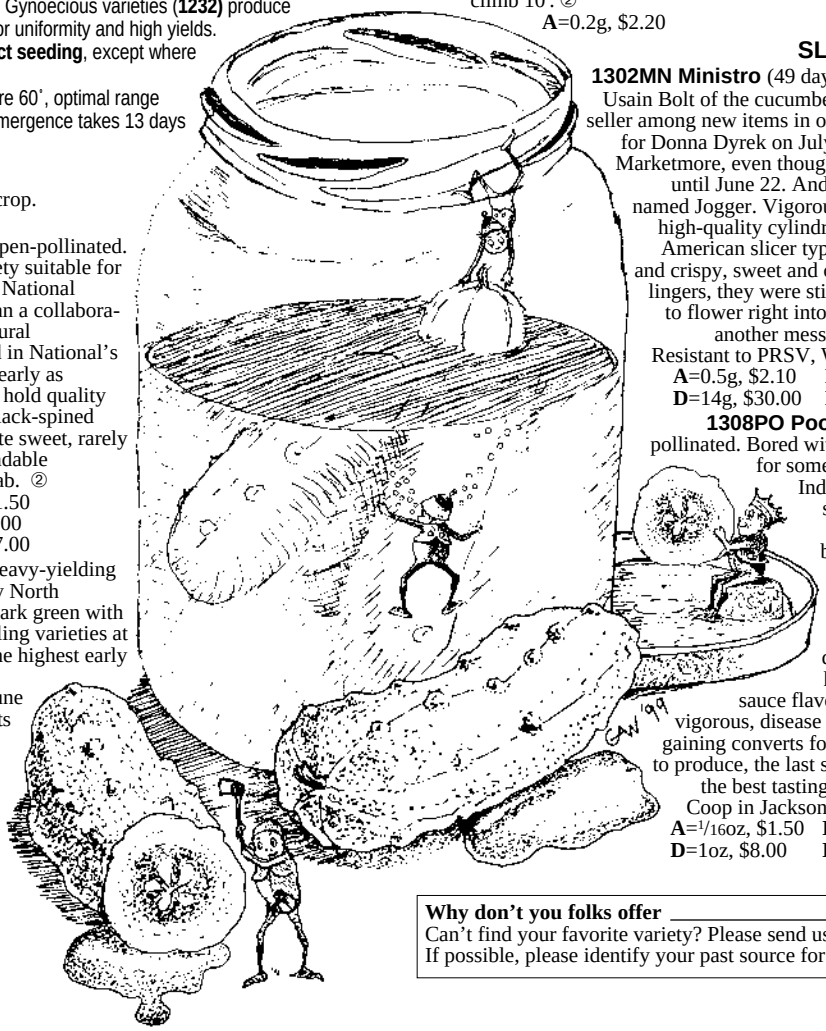
de Bourbonne (50 days) No crop.
Not available in 2014.

1226NL National (52 days) Open-pollinated. In 1924, aiming to create a variety suitable for both small pickles and dills, the National Pickle Packers Association began a collaboration with the Michigan Agricultural Experiment Station that resulted in National's 1929 introduction. Not quite as early as Northern Pickler, but tending to hold quality over a longer season, the firm black-spined dark green fruits are usually quite sweet, rarely bitter. Plants are vigorous dependable producers. Resists CMV and scab. ②

A=1/16oz, 90¢ **B**=1/4oz, $1.50
C=1/2oz, $2.50 **D**=1oz, $4.00
E=4oz, $10.00 **K**=1lb, $27.00

1232CS Calypso (52 days) Heavy-yielding gynoecious hybrid developed by North Carolina State. Fruits medium-dark green with white spines. In a trial of 7 pickling varieties at Highmoor Farm, Calypso had the highest early yield. Using IRT mulch and irrigation, Adam Tomash and June Zellers grew 1,250 saleable fruits in 2010 from just 6 hills of 4 plants each. During peak production they harvested an average of 60 cukes per day. Tolerant to ANTH, ALS, CMV, DM, PM, resistant to scab. ②

A=1/16oz, $1.00
B=1/4oz, $1.80
C=1/2oz, $3.00
D=1oz, $5.00
E=4oz, $14.00
K=1lb, $38.00



1234CC Cross Country (52 days) F-1 hybrid. Named for its widespread adaptability, Cross Country goes the distance. The best pickler in our trials, it bears abundant blocky straight dark green white-spined fruit of uniformly good quality with very small seed cavities. Our trialer described its sweet taste as "crunchy and cool." Had good yields (5.5 lb per plant), appearance, and long uniform fruit in Highmoor Farm trial. Has been highly rated in brine tests. Resistant to scab, but susceptible in our trial to BW. Resistant to ANTH, ALS, PM and DM. ⑤

A=1/16oz, $1.50 **B**=1/4oz, $2.60 **C**=1/2oz, $5.00 **D**=1oz, $9.00
E=4oz, $28.00 **K**=1lb, $92.00

1239LO Little Leaf H-19 OG (60 days) An open-pollinated white-spined parthenocarpic cucumber that can be grown under row cover. Little Leaf sets fruit without pollination, so may be left covered the entire season. Compact vines with smaller-than-normal leaves save space and leave the mature cucumbers much more visible. Despite the plants' emaciated appearance, they produce a huge number of cukes, even under stress. The blocky fruits are a little smaller than what we were used to, but they serve a dual purpose, pickling well while also providing good fresh eating. Has become a big customer favorite. Bred in the Ozarks at the University of Arkansas and released in 1991. Resistant to ANTH, ALS, DM, CMV, PM, scab. PVP.SC-certified. ①③

A=1/16oz, $1.60 **B**=1/4oz, $3.60 **C**=1/2oz, $6.50 **D**=1oz, $12.00
E=4oz, $35.00

1243MG Mexican Sour Gherkin (65 days) *Melothria scabra* Open-pollinated. Also known as Cucamelon or *Sandía de ratón* ('Mouse Watermelon' in Spanish), and Preserving Cucumber in France. Native to Mexico and Central America and a staple in diets there since pre-Columbian times. We love the unusual, so when we saw these darlings on exhibit at Common Ground Fair in 2004, we found them irresistible. So did the judges who gave them a coveted Judges' Award. Janet Winslow brought them back to the Hall this September and calls them a "gateway" crop, meaning they inspire fairgoers to explore the diversity of available food crops. A rampant yet delicate scrambling vine covered with dozens of 1" green and white fruit that look like miniature watermelons but taste more like cucumbers with a crunchy texture and a slight sour zing as if they already had been pickled. Botanically, they are neither cucumber nor watermelon and won't cross with either. They don't bruise and they keep for a long time. Try them in stir fries, pickle them as gherkins, or add to salsas. Also popular among trendy bartenders. Easy to grow, and fun! Slightly more tolerant of cold than cukes, and more drought-resistant. Benefits from a fence or trellis so vines can climb 10'. ②

A=0.2g, $2.20

SLICING

1302MN Ministro (49 days) F-1 hybrid. This sprinter is the Usain Bolt of the cucumber world and was the runaway best seller among new items in our 2013 catalog. It really did ripen for Donna Dyrek on July 15, 2012, a full 20 days ahead of Marketmore, even though she didn't set her transplants out until June 22. And it really did beat out a competitor named Jogger. Vigorous plants with excellent cover bear high-quality cylindrical 8–9" monoecious fruits of the American slicer type, shiny and thin-skinned. Snappy and crispy, sweet and crunchy. Like a lightning Bolt that lingers, they were still loaded with fruit and continuing to flower right into October. "I could go out and pick another mess now," reported Dyrek on Oct. 11. Resistant to PRSV, WMV, ZYMV. ⑤

A=0.5g, $2.10 **B**=1g, $3.60 **C**=4g, $10.00
D=14g, $30.00 **E**=28g, $52.00

1308PO Poona Kheera OG (60 days) Open-pollinated. Bored with American cucumbers and ready for something different? This emigré from India undergoes quite a metamorphosis, 4–5" fruits turning from cream color to golden yellow to russet brown, shaped almost like a potato as they mature. At each stage they remain extremely crisp, sweet, juicy, refreshing and bitter-free. Used in stir-fries, long-marinating dishes, pickles and chutneys. They keep their crisp texture and absorb sauce flavors in Thai and Indian food. Vines vigorous, disease resistant and heavy yielding. "Am gaining converts for Poona—they are always the first to produce, the last still standing, the most prolific and the best tasting," raves Karen Pratt of Mt. Valley Coop in Jacksonville, VT. CCOF-certified. ①

A=1/16oz, $1.50 **B**=1/4oz, $2.80 **C**=1/2oz, $5.00
D=1oz, $8.00 **E**=4oz, $28.00 **K**=1lb, $90.00

Why don't you folks offer _____ ? (please fill in the blank)
Can't find your favorite variety? Please send us your suggestions.
If possible, please identify your past source for the varieties.

1311BO Boothby's Blonde OG (63 days) Open-pollinated. Maine, famous for Moody's Diner and Moxie, also boasts a less well-known heirloom cucumber, maintained for five generations by the Boothby family of Livermore. Boothby's short plump oval fruits average 3–4" and become yellower as they mature. Creamy exteriors with contrasting black spines and juicy refreshing interiors. Larger seed cavities than most cukes, but the seeds actually add to the mild sweet flavor that makes the fruits so good for eating out of hand. Boothby's usually lacks the bitter aftertaste so common in many of the other white cukes we've trialed. Has the "cool" texture uncommon in American cukes. Boothby's goodwill ambassador Will Bonsall passed it on both to Pinetree Seeds and to us. All seed is held over; germinates at 90%. CCOF-certified. ①

A=0.5g, $1.00 **B**=2g, $2.50 **C**=4g, $4.00 **D**=16g, $12.00 **E**=64g, $28.00

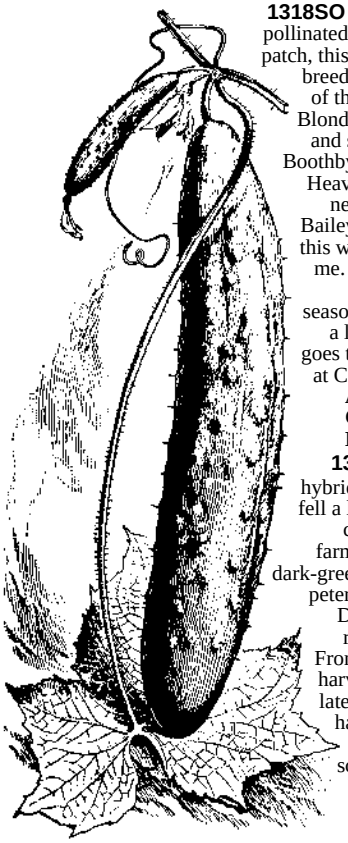
Marketmore 76 (63 days) Dr. Henry Munger's classic open-pollinated cucumber for the ages, long the leading slicing variety in the Northeast, still sells more than 4,000 packets per year for us though it is offered by just about every seed purveyor on the planet. Dark green 8–8½" fruits show good uniformity. Vines vigorous throughout season. Tolerant to CMV, DM, PM, resistant to scab.

1312MM Marketmore 76 ②

A=1/16oz, 90¢ **B**=1/4oz, $1.50 **C**=1/2oz, $2.50 **D**=1oz, $4.00 **E**=4oz, $9.00 **K**=1lb, $27.00

1313MO Marketmore 76 OG CCOF-certified. ③

A=1/16oz, $1.20 **B**=1/4oz, $2.00 **C**=1/2oz, $3.50 **D**=1oz, $6.50 **E**=4oz, $14.00 **K**=1lb, $45.00



1318SO Silver Slicer OG (64 days) Open-pollinated. A revelation in my 2013 cucumber patch, this slicer represents Cornell University breeding at its best. They incorporated all of the good features of #**1311** Boothby's Blonde in a better package. Longer (7–8") and slimmer (fairly narrow 1" core) than Boothby's with a creamy-white tender skin. Heavy set of buttery crunchy crisp fruits, neither watery nor ever bitter. Roberta Bailey, who reported "Everyone who eats this wants more," was surely speaking for me. Yum! Resists PM. Only succumbed in early September at the end of the season. Seed for this variety is sold under a license and a portion of the proceeds goes to support public vegetable breeding at Cornell. OT-certified. ①

A=1/16oz, $1.60 **B**=1/4oz, $3.00 **C**=1/2oz, $5.00 **D**=1oz, $8.00 **E**=4oz, $28.00

1328GL General Lee (66 days) F-1 hybrid. Although the Confederate general fell a little short, this General continues to conquer some Yankee gardeners and farmers. High yields of uniform straight dark-green white-spined 8–8½" slicers don't peter out in the halcyon days of summer. Doesn't develop yellow "bellies" and retains that good Sweet Salad flavor. From a May 13 direct seeding, my 2012 harvest began July 8 and continued into late August. Despite persistent drought, half the fruits were still of marketable quality in mid-August. Tolerant to scab, CMV, PM and DM. ⑤

A=1/16oz, $1.80 **B**=1/4oz, $4.00 **C**=1/2oz, $7.00 **D**=1oz, $12.50 **E**=4oz, $46.00 **K**=1lb, $175.00

1372LM Lemon (68 days) Open-pollinated. Would you buy a lemon from Fedco? A lot of people will buy this lemon beloved by salad chefs and backyard gardeners alike for its heavy yields of rounded 3" fruits shaped somewhat like lemons. Color evolves from pale greenish yellow (immature though preferred by some customers as most tender and least seedy) to lemon yellow (best eating stage for most) to golden yellow (full maturity and seed production).Very crisp and sweet; never gets bitter and one of the best for eating right out of the garden. Samuel Wilson of Mechanicsville, PA, introduced this lemon in his 1894 catalog, some years before Detroit started turning out some lemons you wouldn't buy. ②

A=1/16oz, 90¢ **B**=1/4oz, $1.60 **C**=1/2oz, $2.60 **D**=1oz, $4.20 **E**=4oz, $9.50 **K**=1lb, $30.00

1375RO Richmond Green Apple OG (70 days) Open-pollinated. What's refreshing and juicy, lemon-shaped and comes from Australia? These hard-to-find heirloom cucumbers. I feasted on them in my 2004 trials and have grown them most years since. Beautiful lime-green, they get slightly larger than lemons with sweet mild flavor that really satisfies on a hot summer day. OT-certified. ①

A=1/16oz, $1.60 **B**=1/4oz, $3.50 **C**=1/2oz, $6.50 **D**=1oz, $10.00

BEIT-ALPHA TYPE

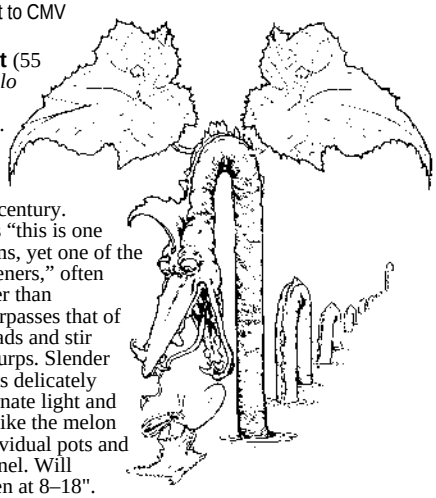
Descended from a vegetable that grows wild in the dry climate of the Middle East, the beit alpha was developed by breeders on an Israeli kibbutz. These small sweet-fleshed cucumbers were originally popular in the Mediterranean, spread to Europe and have now won converts in the States because they don't dehydrate easily, their thin skins don't require peeling, they are almost completely burpless and have a long shelf life.

1382SZ Super Zagross (54 days) Open-pollinated. Green smooth-skinned fruits refreshingly cool, enjoyably mild and almost completely free of the bitterness quite common in American slicers. Zagross does not bear as heavy early sets as the hybrid Amira, but it sustains its cropping power longer, so the cukes will keep coming as long as you keep harvesting. Elaine Carlson makes succession plantings two weeks apart for "months of good eating. So thin-skinned, juicy and refreshing." All seed is held over; germinates at 85%. ②

A=1/16oz, $1.40 **B**=1/4oz, $2.50 **C**=1/2oz, $4.50 **D**=1oz, $8.00 **E**=4oz, $25.00 **K**=1lb, $75.00

LONG-FRUITED TYPES

Asian cukes are more resistant to CMV than other types.



1388PS Painted Serpent (55 days from transplant) *C. melo* var. *flexuosus* Bite into the snake that doesn't bite back. Also known as Armenian Cucumber or Snake Melon, native to Armenia and brought to Italy in the 15th century. William Woys Weaver says "this is one of the oldest of our heirlooms, yet one of the most neglected by our gardeners," often relegated to exhibition rather than *esculentus.* Yet its flavor surpasses that of cucumbers, excelling in salads and stir fries without bitterness or burps. Slender slightly fuzzy flexuous fruits delicately coil like a serpent with alternate light and dark green stripes. Culture like the melon it is, starting indoors in individual pots and transplanting into a low tunnel. Will grow up to 30" but best eaten at 8–18". Straighter if trellised. Never grew well on my central Maine clay, but a prolific producer on my sandy Colrain, MA, soil. First ripe fruit was July 26 in 2010, later in 2011. ②③

A=1/16oz, $1.20 **B**=1/4oz, $2.00 **C**=1/2oz, $3.50 **D**=1oz, $6.50 **E**=4oz, $15.00 **K**=1lb, $50.00

1390SC Shantung Suhyo Cross (60 days) F-1 hybrid. Produces a plethora of uniform 12–14" never-bitter sweet-tasting cukes. Even in dry conditions the vines keep making quality fruits that never develop shrunken necks. Our cucumbers were very gracefully curved, although had we trellised them, they would have been straight. Seed comes from Japan and is very expensive. Tolerant to DM, PM, CMV. ⑤

A=0.5g, $1.50 **B**=2g, $4.80 **C**=14g, $19.00 **D**=28g, $32.00

1392TE Telegraph Improved European (60 days) "Was the best cucumber I ever grew in my garden. Very tasty, no spines, producing till frost," reported Elisabeth Murphy of Princeton, MA. Originally developed for greenhouse production but suitable for growing outdoors, this open-pollinated European cucumber has long (10–14") slim smooth-skinned fruits of very delicate mild flavor, seldom bitter. Stake vines for better-quality straight cukes. Parthenocarpic. ②

A=1g, $1.50 **B**=4g, $4.80

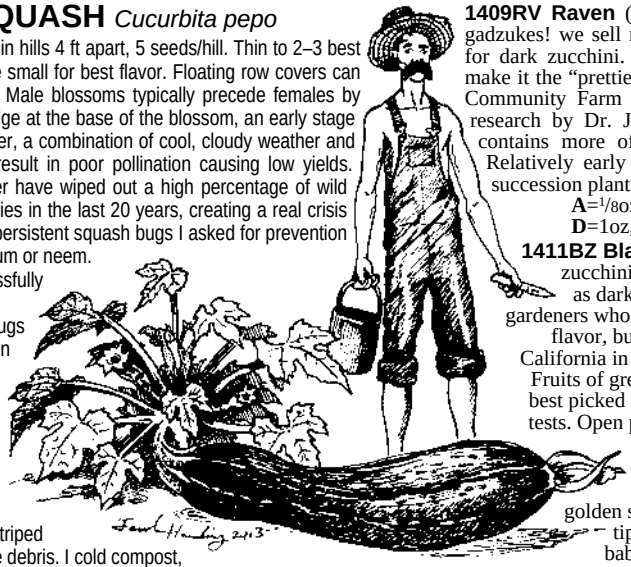
1394SO Suhyo Long OG (61 days) Open-pollinated. Known for its sweet mild burpless flavor, this Asian cucumber grows up to 15" long with a curly shape if unsupported. For straighter fruit that packs better Jason Kafka grows these in his greenhouse in vertical hedges, stretching Trellis Plus netting (**9071** in the OGS section) between conduits. According to Tom Vigue these make good dense pickling cukes if picked young enough. Sets well in heat. Resists PM. QCS-certified. ②

A=1g, $1.30 **B**=4g, $3.20 **C**=16g, $10.00 **D**=48g, $24.00

1396KO Shintokiwa OG/BD (62 days) Open-pollinated. Tom Vigue and Adam Tomash both highly recommend this productive smooth-skinned long slender cucumber that first surfaced in the Turtle Tree catalog. "The hands-down winner at Tomash's trial, combining looks, health and flavor," assessed Fedco evaluator Heron Breen. Tomash considers it superior to the Suhyo cultivars with better uniformity, fewer defective bottoms and less tendency to disease. Sara and Todd Wetzel of Hi-View Gardens in Rockwood, PA report that they were "able to grow bushels of cucumbers…for the first time in many years." The fruits, averaging 9–10" and growing up to an edible size of 1' in good fertility, are sweet, crisp and juicy without bitterness. For really straight fruit, Tomash trellises his cukes by making a 5' arch out of cattle panel, a welded wire material with big holes. Tomash and his partner June Zellers explained their system in an article that appeared in the *MOF&G* winter 2008-9 edition. Google "In Search of the Perfect Tomato Trellis" for more information. Stellar NOP-certified. ①

A=1g, $1.70 **B**=4g, $4.80 **C**=16g, $13.00 **D**=48g, $32.00

SUMMER SQUASH *Cucurbita pepo*



Tender, will not survive frost. Sow in hills 4 ft apart, 5 seeds/hill. Thin to 2–3 best plants. Pick squash when they are small for best flavor. Floating row covers can hasten maturity by 1 to 2 weeks. Male blossoms typically precede females by about a week. Females have a bulge at the base of the blossom, an early stage of the fruit forming. In early summer, a combination of cool, cloudy weather and a declining bee population may result in poor pollination causing low yields. Mites and colony collapse disorder have wiped out a high percentage of wild and domesticated honeybee colonies in the last 20 years, creating a real crisis for cucurbit growers. Plagued by persistent squash bugs I asked for prevention techniques not employing pyrethrum or neem. Betty John of Oneonta, NY, successfully deterred an invasion by dumping sugar on her squash plants. The bugs flew away and did not return. Brenin Wertz-Roth of Giving Tree Farm in Traverse City, MI, suggested covering the plants past the first pollination window until they get big and tough. Eric Sideman, MOFGA's organic extension agent, hauls his squash residues away, because squash bugs and striped cucumber beetles overwinter in the debris. I cold compost, so from now on will no longer put this material in my piles. Minimum germination temperature 60˚, optimal temperature range 70–90˚, optimal temperature 85˚.

Days to maturity are from direct seeding.

ZUCCHINI

1/8 oz packet sows 4–6 hills; 1 oz, 40 hills. 160–240 seeds/oz. The term 'zucchini,' which means 'little squash' in Italian, was not in common parlance until the late '30s. Squash expert Amy Goldman, author of *The Compleat Squash* (ISBN 1-57965-251-4), traces the first true zucchini to 1901 in Milan, but vegetable marrows and cocozelles, now called zucchini, are considerably older.

1402EB Eight Ball (40 days) F-1 hybrid. Noted squash seed grower Hollar did not have to hire Minnesota Fats as their publicity director to win an AAS for Eight Ball in 1999 and we're not hustling when we assert that Eight Ball deserved the award. Eight Ball has the sweetness and squash flavor previously missing from round zucchini. The plant's open bush habit should please both home and market growers. Its earliness might well give you your first ripe squash of the season. They'll keep coming, too, till they run your table! Yes, the attractive shiny speckled dark fruits are mature when they're just a little bigger than pool balls. One customer reports oversized Eight Balls will turn orange and make great fall decorations. ②

A=1/8oz, $2.00 **B**=1/4oz, $3.80 **C**=1/2oz, $7.20 **D**=1oz, $13.50
E=4oz, $50.00 **K**=1lb, $180.00

1404JP Jackpot (42 days) F-1 hybrid from Hollar. Produces high yields of long medium-dark green lightly speckled fruits slightly ridged near the stem. In my first trial I harvested 59 fruits from just two hills. Open plant habit features a long single-stem bush with few spines. Continuous production of firm 6 1/2" zukes, tender, mild and sweet. Take these to market and win the jackpot. ②

A=1/8oz, $1.60 **B**=1/4oz, $2.80 **C**=1/2oz, $5.00
D=1oz, $8.50 **E**=4oz, $25.00 **K**=1lb, $96.00

1406SB Spineless Beauty (46 days) F-1 hybrid. We have so many spineless politicians, why would we need a spineless zucchini? In zucchini, spinelessness is a virtue; when you harvest Spineless Beauty your hands will never itch. (And your palms won't itch either, unless you go into politics!) The 7 1/2x1 1/2" medium-dark green fruits are borne on open plants with spineless petioles. A standout in Sam Birch's and Highmoor Farm's summer squash trials. ⑤

A=1/8oz, $1.70 **B**=1/4oz, $3.20 **C**=1/2oz, $6.00
D=1oz, $11.00 **E**=4oz, $39.00 **K**=1lb, $135.00

1407GA Golden Arrow (46 days) F-1 hybrid. All that glitters is not gold. Instead it could be zucchini. While there never seems to be enough gelt to go around, and always more than enough zucchini, our list lacked golden zucchini after the open-pollinated cultivar of that name turned up with the bitter gourd gene. No more, and no bitterness in this fine hybrid zuke, either. These bright fruits started coming on June 27 from a May 13 sowing in 2012 and continued until a fierce army of squash bugs invaded in early August. Two plants generated 21 fruits in all. We loved Arrow's slender shape and vibrant color and the way its open plant habit made harvesting easy. Never quivering, this Arrow flies straight to the gold. All our seed is held over; tested at a robust 95% germ. ⑤

A=1/160oz, $2.60 **B**=1/80z, $4.80 **C**=1/4oz, $9.00
D=1oz, $30.00 **E**=4oz, $100.00

1409RV Raven (48 days) F-1 hybrid. Our best-selling hybrid zucchini; gadzukes! we sell nearly 3,000 packets each year. Raven sets the standard for dark zucchini. Its smooth-skinned glossy shapely greeny-black fruits make it the "prettiest of all zucchini, plant and fruit alike" to Anne Elder of Community Farm of Ann Arbor. Its merits go more than skin deep as research by Dr. John Navazio showed that Raven's dark pigmentation contains more of the antioxidant lutein than lighter-skinned varieties. Relatively early concentrated production so market growers can make succession plantings. Performs well even in poor squash years. ⑤

A=1/8oz, $1.90 **B**=1/4oz, $3.50 **C**=1/2oz, $6.00
D=1oz, $11.00 **E**=4oz, $42.00 **K**=1lb, $150.00

1411BZ Black Zucchini (50 days) Open-pollinated. Our top-selling zucchini in 2013 with 72 lb. A misnomer as Black Zucchini is not as dark as Raven but instead a very dark green. Perfect for home gardeners who are looking for an open-pollinated zucchini with superior flavor, but who don't require record-breaking yields. Brought from California in 1931 by the Jerome B. Rice Seed Co. of Cambridge, NY. Fruits of greenish-white firm tender flesh with small seed cavities are best picked around 6". The flavor was well above average in our taste tests. Open plant habit makes picking relatively easy. ②

A=1/8oz, 90¢ **B**=1/4oz, $1.60 **C**=1/2oz, $2.60
D=1oz, $4.00 **E**=4oz, $6.00 **K**=1lb, $17.00

1424SE Sebring (50 days) F-1 hybrid. A beautiful golden straight-sided cylindrical zucchini, relatively free of green tips, with open plant habit for easy harvesting. Averaged 17 baby fruits per plant or 6 mature fruits. Rated "very early" in the 2006 OSU trial. Showed some drought stress in early July 2012, producing misshapen fruits, but bounced back nicely. Resistant to PM. ②

A=1/8oz, $2.20 **B**=1/4oz, $4.20 **C**=1/2oz, $8.00 **D**=1oz, $14.00
E=4oz, $50.00 **K**=1lb, $180.00

1434CZ Cocozelle (53 days) Open-pollinated. Rich-flavored zucchini ribbed with light green stripes. This Italian heirloom was called *Cocozella di Napoli* in the 1800s. The term 'zucchini' was first used by California seed house Aggeler & Musser in 1921. ②

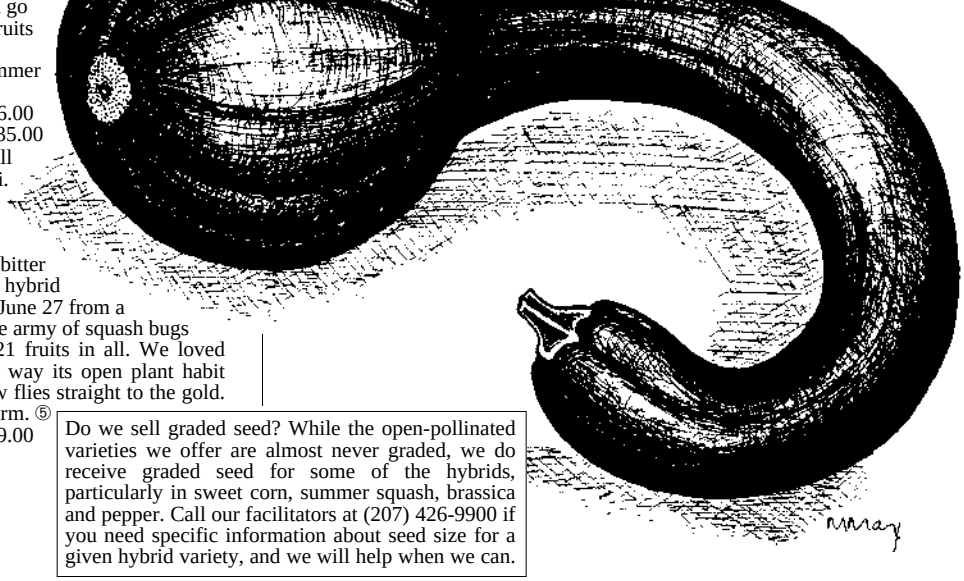
A=1/8oz, 90¢ **B**=1/4oz, $1.60 **C**=1/2oz, $2.80 **D**=1oz, $4.20
E=4oz, $6.00 **K**=1lb, $17.00

1457CO Costata Romanesca OG (60 days) Open-pollinated. Will Bonsall calls it "the only summer squash worth bothering with, unless you're just thirsty." Deeply striped and ribbed, Costata resembles Cocozelle, with a distinctive sweet mildly nutty flavor. Also a productive source for tasty male squash blossoms. Tender skin damages easily, a liability for commercial transport. If you want to win the blue ribbon for largest summer squash at your fair, grow Costata. It reaches 20 lb in a good year. CO-certified. ①

A=1/8oz, $1.40 **B**=1/4oz, $2.60 **C**=1/2oz, $4.50 **D**=1oz, $7.50
E=4oz, $22.00 **K**=1lb, $75.00

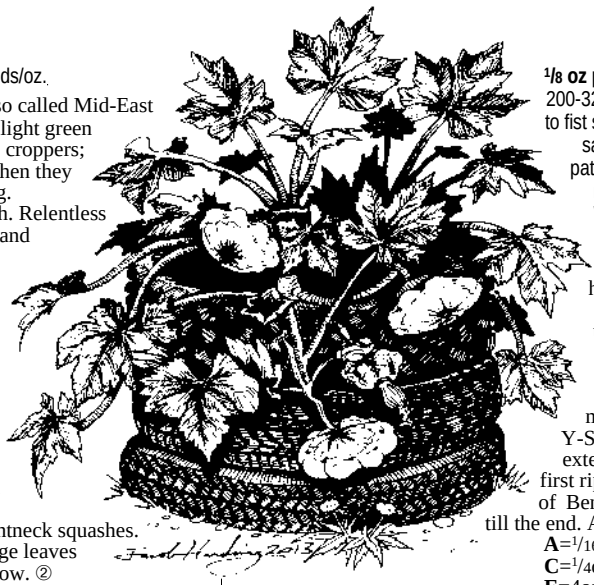
1460TR Tromboncino (60 days summer squash, 90 days winter squash) Open-pollinated. Also known as zucchini rampicante although, unlike other zucchini, a *moschata*. Tender, mild, sweet and nutty when harvested as summer squash at 8–12". Delicious steamed, grilled or sliced raw in salad. Italians use it in gnocchi and to stuff ravioli. When the green-tan (last year we saw a darker green variation with the same shape in the stock) fruits grow very long, they are best baked as winter squash. As might be inferred from its alias, its vines are rampant and should be trellised. "Out-tastes 95% of the Zuke pack," declares Relentless. ②

A=1/8oz, $1.40 **B**=1/4oz, $2.60 **C**=1/2oz, $5.00
D=1oz, $8.00 **E**=4oz, $22.00 **K**=1lb, $80.00



Do we sell graded seed? While the open-pollinated varieties we offer are almost never graded, we do receive graded seed for some of the hybrids, particularly in sweet corn, summer squash, brassica and pepper. Call our facilitators at (207) 426-9900 if you need specific information about seed size for a given hybrid variety, and we will help when we can.

32



LEBANESE

1/8 oz packet sows 5–8 hills; 1 oz, 40–60 hills. 200-320 seeds/oz.

1488WB White Bush (50 days) Open-pollinated. Also called Mid-East or Cousa squashes, Lebanese types are bulbous-shaped light green with white speckles. Robust crawly bushes are amazing croppers; yielded 15 fruits per plant in our trial plot. Pick fruits when they are young and tender or allow them to fatten for stuffing. Marketers note: must be handled gently so not to scratch. Relentless says better than a hybrid in many ways: "Sublime taste and makes better pickled chips than cucumbers." "Firm and flavorful, not at all watery, scrumptious brushed with olive oil and grilled, then showered with minced basil and mint," advises Elaine Carlson. ②

A=1/8oz, 90¢ **B**=1/4oz, $1.60 **C**=1/2oz, $2.80 **D**=1oz, $4.20 **E**=4oz, $8.00 **K**=1lb, $17.00

YELLOW

1/8 oz packet sows 5–8 hills; 1 oz, 40–60 hills. 200-320 seeds/oz.

1504SF Saffron (42 days) We're just mad about open-pollinated Saffron, a 4–6" yellow semi-crookneck that excelled in our trials and has developed a strong following among our customers. Less warty than straightneck squashes. Small single-stem bush with open structure but very large leaves gives good sunburn protection. They call it mellow yellow. ②

A=1/8oz, 90¢ **B**=1/4oz, $1.70 **C**=1/2oz, $3.20 **D**=1oz, $6.00 **E**=4oz, $11.50 **K**=1lb, $25.00

1507GT Gentry (43 days) Despite its name this F-1 hybrid crookneck is not just for the 1%. Though one upscale squash with its butter-yellow smooth skin, mild sweet delicious flavor, and impressive production even under stress, our price keeps it attainable for the 99%. Best harvested at 5–6". Our trialer called it "the perfect crookneck." Now if only we could rein in the corporate crooknecks, we might all realistically aspire to be gentry! ⑤

A=1/8oz, $1.80 **B**=1/4oz, $3.20 **C**=1/2oz, $6.20 **D**=1oz, $12.00 **E**=4oz, $40.00 **K**=1lb, $145.00

1512SP Slick Pik™ (48 days) F-1 hybrid. Unfortunately, when I heard this variety's cutesy name, I free associated on Slick Willie, who was not among my favorite presidents. He gave away too much of his party's heritage, but at least stood up to Newt in the '90s, the last time latter-day Know-Nothings managed to shut down the government. Anyhow, what is slick about this pick is its extreme earliness and its consistent prolific production of slim glossy-skinned 8" fruits. These have minimal bulges or swellings for their seed cavities, long straight necks and excellent flavor. They are spineless, too, like Boehner, McConnell and many other of our so-called leaders. They have resisted heavy cucumber and squash beetle pressure at Roberta's farm for many years and have always been the last to succumb to wilt. Another fine breeding coup by Brent Loy at the University of New Hampshire whose work will leave a better legacy than Slick Willie's. **NEW!** ②

A=1/16oz, $2.20 **B**=1/8oz, $4.00 **C**=1/2oz, $12.00 **D**=1oz, $20.00 **E**=4oz, $70.00

1520LO Lemon OG (50 days) Open-pollinated. Fruits the size, shape and color of a lemon. Like miniature light bulbs (the old-fashioned kind) they proliferate on the compact plants that are rumored to have some resistance to the striped cucumber beetle. Very tasty fried and as a pizza topping. Great appeal at markets. Best flavor when very young. Roberta considers this a lemon if you allow fruits to get bigger than lemons. **BACK!** OT-certified. ①

A=1/8oz, $1.60 **B**=1/4oz, $2.80 **C**=1/2oz, $5.20 **D**=1oz, $10.00 **E**=4oz, $32.00

1526ZP Zephyr (54 days) F-1 hybrid. Its unique contrasting color pattern is as refreshing as the breeze evoked by its name. Looks like a yellow squash dipped in pale green at the blossom end. Sometimes earliest fruits are yellow with green stripes. A straightneck type often with a slight curve at its neck—the product of the yellow crookneck in its breeding. Also has yellow acorn and delicata squash in its background. Large plants with open habit are easy to harvest. Deborah Jaffe of Long Days Farm in S. Cambridge, NY, likes to sell baby Zephyrs by the pint. We prefer them at the 4–6" stage. Excellent grilled. Customers, particularly market growers, asked us for it ever since Johnny's introduced it in 1999. "Tastes great, produces #1 squash like crazy all summer and looks very pretty," summed one. Feel the breeze! ③

A=1/16oz, $2.60 **B**=1/8oz, $5.00 **C**=1/4oz, $8.00 **D**=1oz, $20.00 **E**=4oz, $75.00

1539CO Early Summer Yellow Crookneck OG (58 days) Open-pollinated. Deep yellow warted fruits with bulbous shape and narrow curved necks. Best when picked young. Probably grown by Native Americans. Dates to 1700 and a standard in early 19th century American seed catalogs. The 1888 Burpee catalog rather uncomplimentarily described it as "covered with warty excrescences" but called the flavor "excellent." Burpee charged a nickel for a packet, a dime for an ounce, and 75¢ per pound. CCOF-certified. ③

A=1/8oz, $1.20 **B**=1/4oz, $2.20 **C**=1/2oz, $4.00 **D**=1oz, $7.00 **E**=4oz, $13.00 **K**=1lb, $44.00

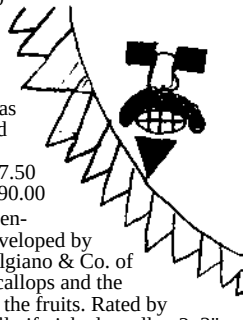
"Thanks for quoting Wendell Berry [last year]…Good stuff. Named our dog Wendell. Sometimes call him Wendell Hairy."
–Hazel Turrone, Jeffersonville, VT

PATTY PAN

1/8 oz packet sows 5–8 hills; 1 oz, 40–60 hills. 200-320 seeds/oz. Harvest as tiny buttons or up to fist size. Anne Elder says they "look like flying saucers from another world." Gourmets call patty pans "scallopini" and consider them the most appetizing of the summer squashes. Were also known as simlins or cymlings a century ago.

1577YO Y-Star OG (48 days) F-1 hybrid. A new color and new earliness for patty pan squash. Bright yellow uniform scallops with pale green stars on the blossom end. Harvested small, they are quite sweet and tender, their open plant habit with minimal spines making them extremely easy to gather. Y-Star really pumps out the fruits over an extended period. In 2010, Donna Dyrek's first ripened July 18, a full two weeks ahead of Benning's, and they kept coming right till the end. AGRIOR-certified. ③

A=1/16oz, $2.70 **B**=1/8oz, $5.20 **C**=1/4oz, $9.00 **D**=1oz, $32.00 **E**=4oz, $115.00



1580SN Sunburst (52 days) F-1 hybrid. Among the most attractive of the Patty Pans with its bright yellow skin, a staple for market growers since winning the 1985 AAS. "Last one still standing," says Anne Elder, "when all else has gone by the wayside of powdery mildew and cold temperatures." ⑤

A=1/8oz, $2.20 **B**=1/4oz, $4.00 **C**=1/2oz, $7.50 **D**=1oz, $13.00 **E**=4oz, $49.00 **K**=1lb, $190.00

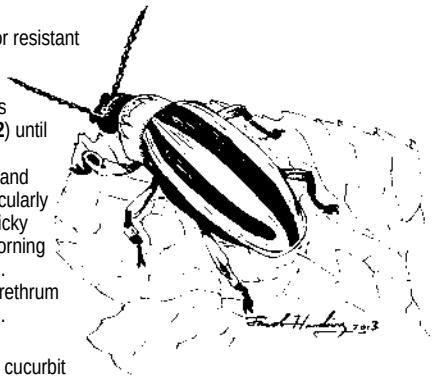
1590BG Benning's Green Tint (55 days) Open-pollinated. Also known as Farr's White Bush, developed by Charles N. Farr and introduced 1914 by F.W. Bolgiano & Co. of Washington, DC. Farr selected for the uniform scallops and the greenish-cream coloring in the younger stages of the fruits. Rated by many as the best-tasting summer squash, especially if picked small at 2–3" diameter when they are especially fine-textured and tender. ②

A=1/8oz, 90¢ **B**=1/4oz, $1.60 **C**=1/2oz, $3.00 **D**=1oz, $5.00 **E**=4oz, $8.00 **K**=1lb, $25.00

BITTER MELON *Momordica charantia*

1594BM Long Bitter Melon (70 days from transplant) Also known as Bitter Gourd, though botanically neither a melon nor a gourd. Parboiling or salting when preparing removes much of the bitterness. In our trial test Nikos served it sliced in an omelette, one of its traditional uses. To keep them fresh and tender, bitter melons are best harvested immature, no longer than 6–8". Remarkable-looking fruits are light green with ridges and pebbles. Once they start turning yellow they are overripe. Vines sprawl and benefit from trellising. Not a huge producer in Colrain, MA, but probably would be farther south. Prized in India and China for both culinary and medicinal uses. All our seed is held over and tests at 81% germination. Supplier is discontinuing so *this is the final year for this strain.* We will trial for a similar replacement. ⑤

A=1/8oz, $2.80



Pest: Striped Cucumber Beetle
Cultural controls: use tolerant or resistant varieties, rotate crops, till under crop debris soon after harvest, use floating row covers (**9101**) or insect netting (**9080-2**) until flowers appear, perimeter trap cropping (**1411** Black Zucchini and **1655** Blue Hubbard make particularly good trap crops), use yellow sticky strip (**8830**), hand-pick early morning when beetles are very sluggish.
Materials: Surround (**8870**), Pyrethrum (PyGanic **8925**), Bugitol (**8890**).

Pest: Squash Bug
Cultural controls: rotation, till in cucurbit debris before winter and plant a cover crop, boards on soil surface near squash will attract bugs overnight which can be killed, destroy egg clusters on undersides of leaves, avoid mulching.
Materials: Pyrethrum on young nymphs, Neem.

Pest: Squash Vine Borer
Cultural controls: butternut squash is resistant, *maximas* & *pepos* susceptible; rotation, plow in squash vine debris soon after harvest, use floating row covers (**9101**), watch for wilting plant parts and destroy borer within.

WINTER SQUASH

Winter squash is organized by species and common groupings.

Cucurbita pepo:
1600-1610 Acorns
1611-1614 Delicata/Dumplings
1615-1616 Spaghettis
Cucurbita maxima:
1617-1619 Bananas
1620-1649 Buttercup/Kabochas
1650-1659 Hubbards
1660-1679 Miscellaneous *maxima*
Cucurbita moschata:
1680-1689 Butternuts
1690-1699 Miscellaneous *moschata*

All open-pollinated except where noted. Plant 4–5 seeds per hill. Allow 4–6 feet between hills. Tender, not frost hardy. Heavy nitrogen feeders. Excessive heat and/or drought can prevent blossom set, reduce yields. Winter squash can take one or two light frosts on the vine. To improve flavor and storage, field cure for at least 10 days after harvest, covering if hard frost threatens. Store under proper conditions, 50˚ and 60–70% relative humidity. Storing at temperatures under 50˚ reduces shelf life. Be sure to use damaged, stemless or small fruit first. Acorns have the shortest storage time before getting stringy, followed by delicatas, buttercup/kabochas.
Days to maturity are from direct seeding.

CUCURBITA PEPO

Have hard 5-sided ribbed stems, and fruits are usually ribbed. One of the oldest domesticated species. Pepo derives from the Greek *pepon*, meaning "ripened by the sun." They also include summer squashes and small gourds, as well as miniature pumpkins **1702**-**1705**, pie pumpkins **1711**, **1718**-**1723**, intermediate pumpkins **1708** and **1729**, jack-o'-lanterns **1710**, **1748**-**1752**.

Acorn group

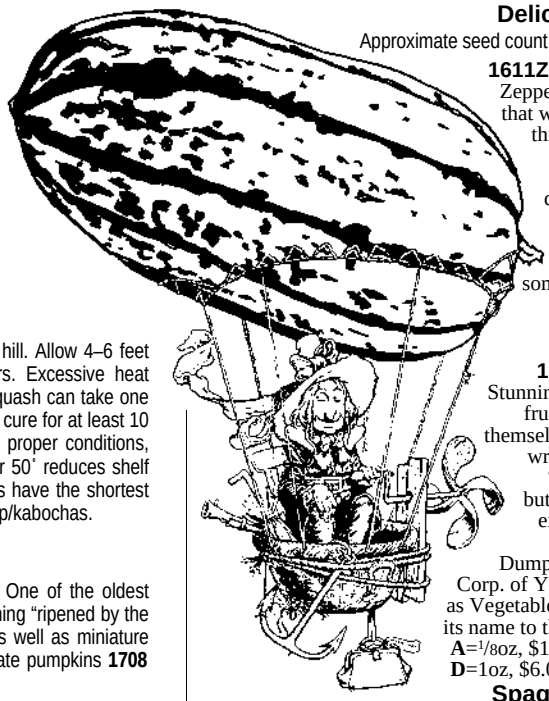
Approximate seed count: 280 seeds/oz, **1/8 oz packet sows 7 hills**. Dr. Loy found that acorn squash often are not fully ripe even when they attain full size and color. They continue to develop sugars until 45 days after pollination. Do not harvest until most of the fruits display an orange ground spot. Much of their reputation for watery, fibrous, inconsistent eating quality is probably the result of premature harvesting.

1605CV Carnival (85 days) F-1 hybrid. Carnival will give your senses a thrilling ride: first treating your eyes to a kaleidoscope of colors, each fruit flecked with shades of green, gold and yellow, no two exactly alike. Then wafting to your nostrils with its nutty squash aroma as it bakes, finally thrilling your taste buds with its full-bodied sweetness. This semi-bush acorn type produces medium-sized fruits near the crowns for easy picking. Jason Kafka reported outstanding success this year growing Carnival and #**1624** Sweet Mama on landscape fabric. A marvelous seller at farmers markets. Will store for many months. *Note: color variation is a function of temperature. In high temperatures Carnival will have less yellow and gold and more green.* ⑤
A=1/8oz, $2.20 **B**=1/4oz, $4.20 **C**=1/2oz, $8.00
D=1oz, $14.00 **E**=4oz, $55.00 **K**=1lb, $210.00

1608TQ Table Queen (90 days) Black-green ribbed 1 1/2–2 lb fruits good for baking. Dry flesh is best eaten within 3–4 months after harvest. Introduced by the Iowa Seed Co. in 1913 and once known as Des Moines, Queen began a trend away from monster squashes in favor of smaller fruits. A similar squash was grown by the Arikara tribe in North Dakota. ②
A=1/4oz, 90¢ **B**=1/2oz, $1.60 **C**=1oz, $3.00
D=4oz, $7.00 **E**=1lb, $22.00 **K**=5lb, $100.00

1609SO Sweet REBA OG (90 days) REBA stands for Resistant Early Bush Acorn. If you are acorn-averse, REBA might make you reconsider. This Cornell release is one of the sweetest acorns I've tried, flesh dry and substantial. Despite compact bush habit, heavy yields of 1–1 1/2 lb fruit. Welsby harvested 25 squash from four plants. They sold so fast that she didn't get to try one "but everyone said they were delicious." Resists PM, helping sugars to develop. VOF-certified. ③
A=1/8oz, $2.30 **B**=1/4oz, $4.40 **C**=1/2oz, $8.00
D=1oz, $15.00 **E**=4oz, $55.00

1610PO Paydon OG (105 days) This extremely rare large tan acorn migrated from France to Louisiana to Ohio to Bosco, IL, where it was maintained by the Paydon family since the 1860s. Its flavor, texture and sweetness reminded us of Delicata and Sweet Dumpling. Delicious yellow flesh, though a bit stringy. Teardrop-shaped fruits turn from creamy-tan to bright yellow in storage. Extremely vigorous vines give moderate yields of 3 lb fruits. Heldover seed germs at 85%. *Requires too long a season for cold northerly areas.* CO-certified. ①
A=1/8oz, $1.80 **B**=1/4oz, $3.40 **C**=1/2oz, $6.00
D=1oz, $10.00 **E**=4oz, $32.00 **K**=1lb, $95.00



Delicata/Dumpling group

Approximate seed count: 450 seeds/oz. **1/8 oz packet sows 4 hills.**

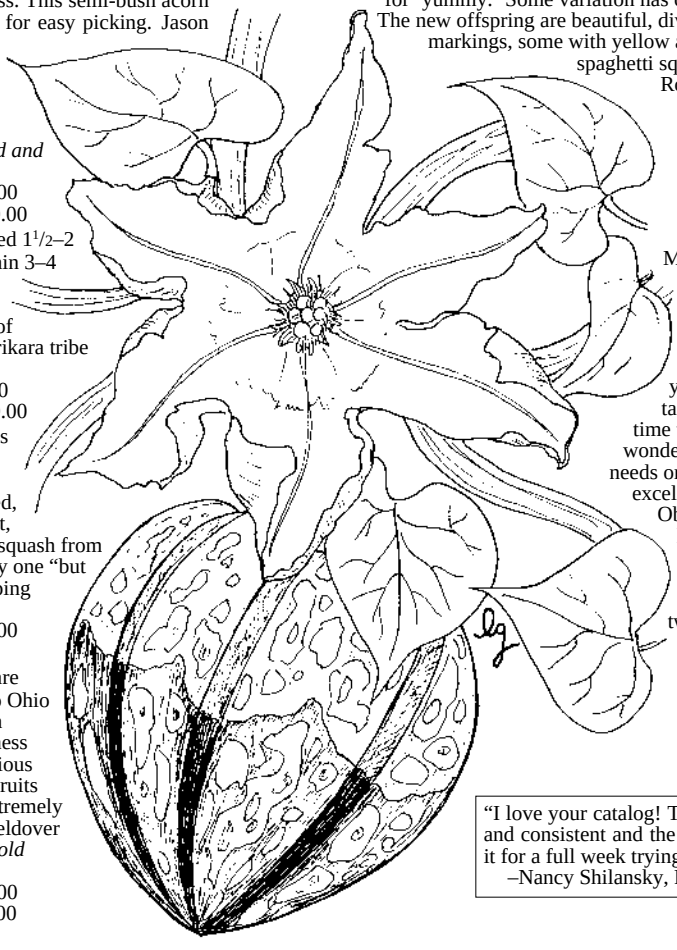
1611ZO Zeppelin Delicata OG (100 days) Zeppelin is good Delicata, from an old strain that was not affected when the trade allowed this beloved 1894 heirloom to be crossed by desert gourds. The lovely ivory-colored oblong 1 lb fruits with dark green stripes have the unsurpassed sweetness that gives Delicata its good reputation. In storage the green stripes turn orange and the cream background sometimes yellows. OT-certified. ①
A=1/8oz, $1.90 **B**=1/4oz, $3.50
C=1/2oz, $6.40 **D**=1oz, $12.00
E=4oz, $32.00 **K**=1lb, $115.00

1614SD Sweet Dumpling (100 days) Stunning 1–1 1/2 lb ivory-colored green-striped fruits shaped like miniature pumpkins sell themselves on the stand. *New York Times* food writer Regina Schrambling calls them the "avocados of squash" for their inherent buttery richness and sweet-tangy taste. To experience its sweet dry and memorably rich deep orange flesh, make sure your Dumpling is ripe. Introduced by Sakata Seed Corp. of Yokohama, Japan, in 1976 and marketed as Vegetable Gourd. Sold better after they changed its name to the more appealing Sweet Dumpling. ③
A=1/8oz, $1.20 **B**=1/4oz, $2.20 **C**=1/2oz, $3.80
D=1oz, $6.00 **E**=4oz, $15.00 **K**=1lb, $42.00

Spaghetti group

Approximate seed count: 190 seeds/oz. **1/8 oz packet sows 5 hills.**

1615SO Squisito OG (87 days) I groaned when Nikos handed me packets of spaghetti squash to trial. Normally I disdain this stringy genre, having long believed it was nothing more than a breeding disaster cleverly rescued by a public relations campaign. But whatever Minnesota breeder Elvin Martin saw in these early-maturing 4 lb deep-gold oblong fruits, I see too. Martin doesn't recall what squash he started with, but he liked it and has been selecting it for "at least six" years. Approaching it with great skepticism, I found it wonderfully sweet and ended up eating the larger half in one sitting. Unprecedented! Nikos named it Squisito (skwee-ZEE-toh), Italian for 'yummy.' Some variation has crept into this exquisite squash. The new offspring are beautiful, diverse in color, some with green markings, some with yellow and some looking like a typical spaghetti squash. All made great eating for Roberta, Heron and Nikos in this year's taste test. ☘2009. MOFGA-certified. ①
A=1/8oz, $1.70
B=1/4oz, $3.00
C=1/2oz, $5.60



1616SP Spaghetti (88 days) Penny Kupinski of Harrisburg, MO, took us to task for damning spaghetti squash with faint praise. "From your description you may not have had *truly ripe* spaghetti squash which is a *deep* gold. Pale yellow is nowhere near ripe and tasteless and tough. Takes a long time to mature even here…but has a wonderful nutty flavor when ripe and needs only a little salt and pepper to be excellent…It is also a great keeper." Oblong fruits, generally around 4 lb with spaghetti-like strings in the flesh. First commercialized by Sakata in Japan in 1934 and brought to the States by Burpee two years later. ②
A=1/4oz, $1.10
B=1/2oz, $2.00
C=1oz, $3.60
D=4oz, $11.00
E=1lb, $39.00
K=5lb, $185.00

"I love your catalog! The descriptions are thorough and consistent and the art is wonderful. I devoured it for a full week trying to decide."
–Nancy Shilansky, Rumney, NH

CUCURBITA MAXIMA

Have fat round stems that turn corky and woody when the squash is ripe. Fruits tend to be medium to large and often have bumpy surfaces and button-ends. See also pumpkins: Lumina **1713**, Jarrahdale **1716**, Rouge Vif d'Etampes **1727** and Big Max **1757**.

Banana group

Approximate seed count: 125 seeds/oz. **1/8 oz packet sows 4 hills.**

1617GO Guatemalan Blue OG (95 days) Boasts an oh-so-smooth flesh texture that goes down easily and a stick-to-the-ribs heartiness that warms and satisfies on a chilly autumnal night. Heirloom from Guatemala sets 5x15" banana-shaped bluish-green fruits with slight striping. My two, grown in the heat of 2012, were ripe in mid-late August. I had one at each end of its 5–10 lb spectrum. A good keeper with thick firm moist yellow not overly sweet flesh. No new crop. All seed is held over; germinates 85%. Seed in short supply. *Order early.* MOSA-certified. ②

A=1/8oz, $1.80 **B**=1/4oz, $3.20 **C**=1/2oz, $5.50

1618SB Sibley (100 days) Also known as Pike's Peak. By far the best squash I tasted in 2008, and matched only by #**1635** Sunshine in 2009, this once-revered brown-seeded heirloom first surfaced in the Missouri River watershed in the 1830s and is similar to kindred varieties found among the Winnebago Indians. Our original seed crop was from Hiram Sibley, whose great-great-great-grandfather of the same name introduced it to commerce in 1887 through his seed company in Rochester, NY. Present-day Hiram has been growing it in Maine for the past six years, selecting for trueness to type, taste and adaptability, and providing us with our stock seed. Vigorous 12–15' vines produce slate-blue obpyriform 1' long fruit weighing 6–8 lb, once described by Michael Pollan as "pinched in both ends and bulging at the waist." Famous New England seedsman James J.H. Gregory called it "magnificent" and Goldman rates it "the best of the bananas," a group she calls "top tier." Ours in 2008 was rich, moist, flavorful and sweet, though we sampled it in October, too soon. "Sibley is simply wonderful," raved David Nonnenmacher. The quintessential storage squash, not coming into its own until January after its orange flesh has dried and sweetened. Brought on board the Slow Food Ark of Taste. ①②

A=1/8oz, $1.90 **B**=1/4oz, $3.50 **C**=1/2oz, $6.50 **D**=1oz, $11.00
E=4oz, $30.00 **K**=1lb, $90.00

1619PB Pink Banana (105 days) Though fruits average "only" 14 lb, in good years an occasional squash can grow so huge that it inspires more jokes than even the massive zucchinis! As preposterous as its exaggerated banana shape and 5x18" dimensions may be, Banana boasts remarkably tasty moist sweet orange flesh. Offered by Aggeler & Musser Co. in 1893, it developed an underground following on the West Coast but has never been as widely grown in our parts. Though *not adapted to northern New England's cool summers*, has become a better choice as our climate warms. Don't pick until its stocky blunt stem is corky. Since it sometimes develops sunken spots that can lead to rot, be diligent in storage and use for Thanksgiving dinner or by early winter. All seed is held over; tests 85%. ②

A=1/4oz, $1.30 **B**=1/2oz, $2.40 **C**=1oz, $4.50 **D**=4oz, $11.00
E=1lb, $36.00

Buttercup/Kabocha group

Approximately 160 seeds/oz. **1/8 oz packet sows 4 hills.** Buttercup squashes, the main type grown in the Northeast, account for about 19% of New England winter squash sales.

1622BU Bush Buttercup Emerald strain (80 days) Fruits generally a lighter green than Burgess Buttercup, not as uniform or good quality but ready two weeks earlier. Mostly bush habit saves space. Introduced 1952. ②

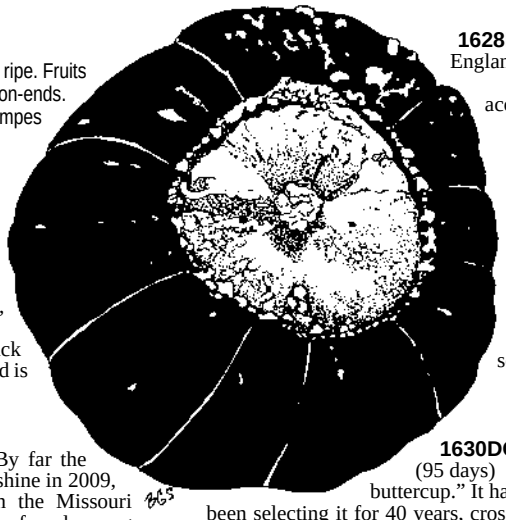
A=1/4oz, $1.50 **B**=1/2oz, $2.70 **C**=1oz, $5.00 **D**=4oz, $15.00
E=1lb, $55.00

1624SM Sweet Mama (88 days) F-1 hybrid. If you like buttercup squash you should try Sweet Mama, a grey-green drum-shaped buttercup type with rounded shoulders and without the cup. A week earlier than Burgess with outstanding sweet flavor. Among my favorite large winter squash, Mama pleases commercial growers as well as home gardeners. 1979 AAS. ⑤

A=1/8oz, $2.50 **B**=1/4oz, $4.60 **C**=1/2oz, $8.50
D=1oz, $15.00 **E**=4oz, $58.00

1626RK Red Kuri (92 days) Also called Uchiki Kuri; *Kuri* means 'chestnut' in Japan. Growers admire its spectacular red-orange fruits, among the most attractive of all squashes. Its flavor elicits a wide range of comments from "the best winter squash" to "glorified zucchini, flavor like water." Liking the dry flesh of this Japanese squash, we think the truth lies somewhere in between. Very popular at roadside stands. Teardrop-shaped fruits avg 3–4 lb. Though reputed to be good keepers, their thin skins do not store well, according to members of one CSA. Also prized for the aroma of their blossoms when fried. ⑤

A=1/8oz, $2.40 **B**=1/4oz, $4.50 **C**=1/2oz, $8.50
D=1oz, $16.00 **E**=4oz, $42.00 **K**=1lb, $140.00



1628BB Burgess Buttercup (95 days) New England's favorite winter squash, enjoyed for its sweet deep-orange flesh. Fruits, with an acorn-shaped button on the blossom end and flattened shoulders, average 3–4 lb with about 4 per hill. Stem is well dried when ripe. The original buttercup strain showed up in 1925 as a chance cross between Quality and Essex Hybrid in the trial garden at North Dakota Agricultural Experiment Station. After further selection by famous seedsman Albert Yaeger, Oscar H. Will of Bismarck introduced it in his 1931 catalog. Alan Kapuler has said, "If you pick only one squash to grow this is it." ②

A=1/4oz, $1.40 **B**=1/2oz, $2.50
C=1oz, $4.50 **D**=4oz, $10.00
E=1lb, $36.00 **K**=5lb, $170.00

1630DO Uncle David's Dakota Dessert OG (95 days) David Podoll calls this strain "the original buttercup." It has been in his family for 70 years. They've been selecting it for 40 years, crossing it with hubbards and other *maximas*, primarily for color, taste, sweetness, and vigor and hardiness in cold weather, but also for thick flesh, small seed cavities and higher productivity. The Podoll family bake it into pies without using any other sweetener. Also a versatile main-dish squash, with all the character that makes buttercup a New England favorite. And it is one rugged buttercup, withstanding several cold summers and all those temperature extremes in recent seasons. ICS-certified. ①

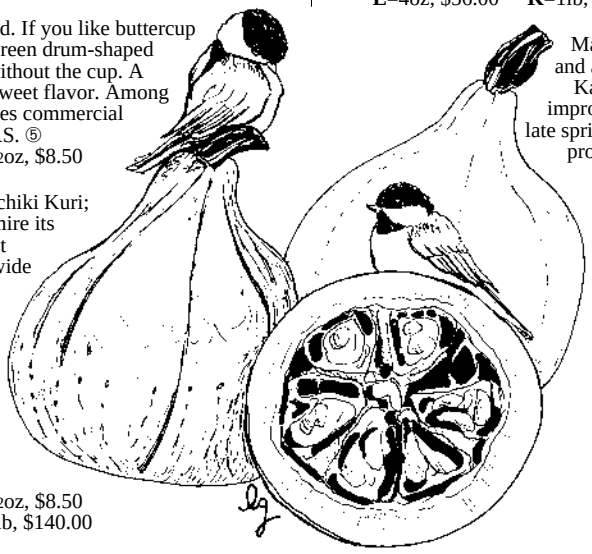
A=1/4oz, $1.80 **B**=1/2oz, $3.40 **C**=1oz, $6.60 **D**=4oz, $26.00
E=1lb, $100.00

1633ER Eastern Rise (95 days) F-1 hybrid. The best-yielding hybrid in Heron Breen's trial, besting #**1635** Sunshine and Confection. Featuring a creamy texture with just the right sweetness, Rise's heavenly flavor won unanimous praise from our feisty warehouse tasting crew. Cures more reliably than Sunshine, even in poor fall weather, with almost no spoilage until after February. A superb storage squash that comes into full flavor after December. Recommended for sales after the holidays. Average 3 1/2 lb fruits, attractive orange-red streaked with green, flattened large buttercups without the turban. Firm orange flesh with rich nutty flavor in perfect balance, the right sweetness, the right moistness, the right texture, smooth and hearty. Grows well in cool conditions; dislikes extreme heat. When grown in inadequate sunlight may develop green spots. PM tolerant. ③

A=1/8oz, $2.60 **B**=1/4oz, $5.00 **C**=1/2oz, $9.50 **D**=1oz, $18.00
E=4oz, $65.00 **K**=1lb, $240.00

1635SS Sunshine (95 days) F-1 hybrid. In the last 19 years, the folks at Johnny's have won a remarkable seven All-America awards. Sunshine is Rob Johnston's best, combining the spectacular scarlet color of a Red Kuri with a sublime eating quality previously lacking in red squash. The bright orange flesh is dry yet tender, sweet yet meaty, with real substance. While none of the Buttercup types is high yielding, these short-vined plants give a fair harvest of fruits shaped like a buttercup but with rounded shoulders and no turban. One year we had 14 averaging 4.4 lb each from just three hills. Johnston says they derived Sunshine from a cross between two different orange varieties developed at Johnny's. Counting the 3 years needed to stockpile a sufficient seed supply, it required almost 20 years' labor. Well worth the effort. Good for fall sales and eating. Thin skins do not cure well in cold wet autumns and can be damaged around stems and shoulders by light frosts. Not recommended for storage after New Year. ③

A=1/8oz, $2.50 **B**=1/4oz, $4.80 **C**=1/2oz, $9.20 **D**=1oz, $17.50
E=4oz, $56.00 **K**=1lb, $210.00



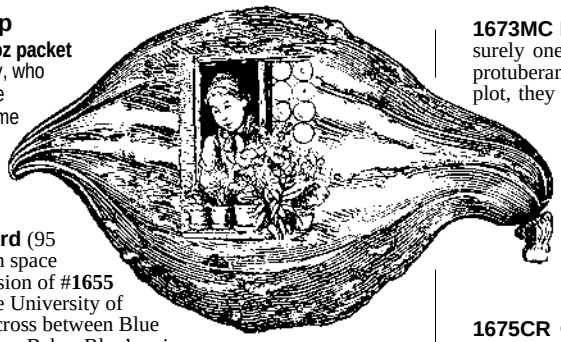
1637ND Nutty Delica (95 days) F-1 hybrid. Mainers traditionally love the dry-fleshed squashes and after storage this may be the best of the Japanese Kabochas. Complex flavor of its deep golden flesh improves with age, peaking after January. Keeps until late spring. Incredibly sweet, slightly nutty flavor. Vines produce abundant 2–3 lb flattened round dark fruits stippled with bright green. Grows well in cool conditions. ⑤

A=1/8oz, $2.60 **B**=1/4oz, $5.00
C=1/2oz, $9.50 **D**=1oz, $18.00
E=4oz, $65.00

Disease: Powdery Mildew
Controls: Use small plots to slow spread, plant indeterminate (viney) varieties, control weed competition.
Materials: sulfur (**8865-8**) and whole milk, mineral or other oils in combination with potassium bicarbonate, Actinovate (**8851**).

Disease: Bacterial Wilt
Cultural control: Striped Cucumber Beetle is vector—control it; choose resistant varieties.

Hubbard group



Approximately 120 seeds/oz. **1/8 oz packet sows 3 hills.** James J.H. Gregory, who introduced hubbards to commerce around 1850, called them "the acme of perfection in squashdom," though they now account for only about 5% of New England winter squash sales.

1654BB Baby Blue Hubbard (95 days) For home gardeners with space limitations, a scaled-down version of #**1655** Blue Hubbard developed at the University of New Hampshire from a 1953 cross between Blue Hubbard and Bush Buttercup. Baby Blue's vines are much more compact and its fruits much smaller (about 4–5 lb), but their flavor at maturity doesn't match up to those traditional large hubbards and their yield is lower, too. All seed is held over. ②③

A=1/8oz, $1.30 **B**=1/4oz, $2.40 **C**=1/2oz, $4.00 **D**=1oz, $7.00
E=4oz, $16.00 **K**=1lb, $52.00

1655BH Blue Hubbard New England strain (100 days) Introduced in 1909 by Gregory as Symmes Blue Hubbard, in honor of S.S. Symmes, a gardener who worked for his company for many years. Gregory considered it his best introduction, praising its flavor, productivity and storage qualities. The 1917 Gregory catalog said "close your eyes…and you would think you were eating cake." Bright yellow-orange dry sweet flesh. Each squash will feed a large family because fruits average 15–20 lb, sometimes exceeding 30 or 40 lb. Vines crawl all over the garden. Traditional New England Thanksgiving favorite. Prized also for its large white sweet seeds—delicious roasted. Blue Hubbard has proven effective as a perimeter trap crop for striped cucumber beetles. Completely encircle a main crop of other cucurbits with Hubbard vines, concentrating the pests in the border areas. ③

A=1/4oz, $1.10 **B**=1/2oz, $2.00 **C**=1oz, $3.60
D=4oz, $9.00 **E**=1lb, $25.00 **K**=5lb, $120.00

Miscellaneous *Maxima*

Lower Salmon River OG (94 days) No crop. *Not available in 2014.*

1668SM Sweet Meat (95 days) This tasty 12–15 lb slate-grey heirloom, shaped like a slightly flattened round pumpkin was maintained by an Oregon family for 100 years and sold by Gill Bros. of Portland, OR. It has long had a loyal following in the West. Now its fame is spreading east. Its dry sweet nutty thick orange flesh improves in storage with a flavor similar to #**1655** Blue Hubbard. ②

A=1/4oz, $1.10 **B**=1/2oz, $2.00 **C**=1oz, $3.60
D=4oz, $9.50 **E**=1lb, $27.00

1672GO Galeux d'Eysines OG (98 days) Garden writer Barbara Damrosch says "it looks as if peanut-shaped worms were crawling about its surface." Depending on your point of view, it is either among the ugliest or most beautiful of all squashes. I vote for the latter. This heirloom, hailing from the Bordeaux region of France, was listed by Vilmorin in 1883 as Warted Sugar Marrow. It resurfaced at the Pumpkin Fair in Tranzault, France, in 1996. Shaped like rounded slightly flattened pumpkins, the 15 lb fruits have salmon-peach skins covered with large warts. Although Galeux is worth growing for beauty alone, its tender moist sweet orange flesh is delightful in soups or baked. Ripened easily from direct seeding both in 2004 and 2007, neither prime squash years. For your autumn pleasure; not a good keeper. MOSA-certified. ②

A=1/16oz, $2.00 **B**=1/8oz, $3.60 **C**=1/4oz, $5.50 **D**=1/2oz, $10.00
E=1oz, $18.00 **K**=4oz, $50.00

The Brinton Place

Thanksgiving morning we look again at the "dream" farm,
Still, out of our reach.
We walk the field, see geese bedded down near the bay,
And end in the orchard,
Where Baldwins cold and crunchy hang still on two trees.

The first bite held all an apple can,
including the idea of forbidden fruit, just out of our reach.

1673MC Marina di Chioggia (100 days) The sea pumpkin of Chioggia is surely one of the most beautiful squashes with its deep ridges and bumpy protuberances. Though fruits grow quite large, averaging 15 lb in my 2010 plot, they have such eye appeal that growers report they are hot sellers. As delectable as they are handsome, even those harvested in 2009's horrific squash year won accolades from our staff for their dense moist texture, rich sweetness and real substance. Definitely in Heron's and my top five. Variability adds to their appeal, color ranging from aquamarine to very dark green, most with bumps, some without. Delicious baked, in pies; ideal for gnocchi and ravioli. *Caution: rampant vines.* "Gorgeous, high yielding, vigorous and very yummy," sums up Heron. ②

A=1/8oz, $1.70 **B**=1/4oz, $3.20 **C**=1/2oz, $5.50
D=1oz, $8.50 **E**=4oz, $25.00 **K**=1lb, $92.00

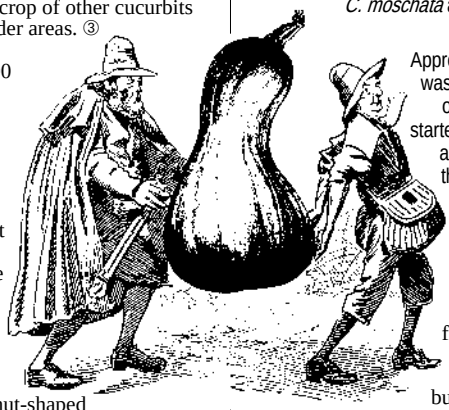
1675CR Candy Roaster ECO (112 days) This Appalachian heirloom, peerless as a baked squash, boasts superb eating quality worthy of its name. Grows luxuriant vines, large leaves and matures somewhat warty pinkish-orange enlarged buttercup-shaped fruits with blue-green markings. Warmth brings out its sweetness. One of our seed growers, Scott Paquin of Firefly Farm in Burnsville, NC, has worked with chefs to Maxima-ize the sweet flavor and large size (13 lb avg) and to popularize it to a point where his market customers ask for it by name. "Makes the most excellent squash soup with apples, potato, ginger, garlic, onion, cumin, curry, cayenne, salt and pepper," says Paquin. He has been selecting since 2003 for storability with notable improvement. Avg production 2 fruits/plant ranging from 5–25 lb each. *Caution: Ripens in northern areas only in good growing years.* ①

A=1/8oz, $1.80 **B**=1/4oz, $3.20 **C**=1/2oz, $6.00 **D**=1oz, $11.00
E=4oz, $30.00

CUCURBITA MOSCHATA

C. moschata are usually smooth and tan. See also **1740** Cheese Pumpkin.

Butternut group



Approximately 280 seeds/oz, **1/8 oz packet sows 7 hills.** Butternut was introduced in 1936 by Joseph Breck and Sons of Boston, out of Canada Crookneck, an 1800s variety. Butternuts need to be started indoors to mature in our climate. They are the best keepers and contain 30% more vitamin A than hubbards and 80% more than acorns.

1683BO Burpee's Butterbush OG (87 days) This highly esteemed variety now sells more packets even than Delicata. "Hands down the best" of the nine different butternuts Mark Fulford tried over the years. Fruits average no more than 1 1/2 lb, each a perfect one-person serving chock full of deep, reddish-orange flesh "as sweet as the best sweet potatoes." Seed cavities are small. Fulford describes the flavor as nutty, and the texture moist but never watery, not as moist as the large butternuts. They were a big hit when staffer Paula Fulford brought them to our warehouse for a taste test. Their earliness is an important plus in cold summers. Though named and classed as a bush butternut, more accurately they have determinate vines which can crawl up to 10' in good fertility. Still at a big advantage over the unrestrained crawlers where space is precious. Average yield is 3–5 ripe fruits per plant. Flesh has superior flavor and deeper color than any other butternut. Smooth tan skin; excellent keeper. QCS-certified. ①

A=1/8oz, $1.80 **B**=1/4oz, $3.20 **C**=1/2oz, $6.00 **D**=1oz, $11.00
E=4oz, $30.00

Ponca Baby Butternut (90 days) Ideal for short-season gardeners who like butternut but can't vine-ripen Waltham. Baby 2 lb fruits ripen here well before Common Ground Fair. With small seed cavities, the fruits mature to tan without green streaking, but don't store as well as their big Waltham cousins. Developed by Dermot P. Coyne at the University of Nebraska in 1976.

1685PC Ponca Baby Butternut ③

A=1/8oz, $1.90 **B**=1/4oz, $3.50 **C**=1/2oz, $6.00

1686PO Ponca Baby Butternut OG MOFGA-certified. ①

A=1/8oz, $2.00 **B**=1/4oz, $3.60 **C**=1/2oz, $6.40 **D**=1oz, $10.00
E=4oz, $30.00

Waltham (105 days) Elegant 9" tan fruits weighing 4–5 lb. Orange dry flesh has a sweet nutty flavor. Excellent keeper. Bred by the Massachusetts Agricultural Extension Service by crossing New Hampshire Butternut (a 1956 Yaeger/Meader development) with a neckless *moschata* from Turkey, and introduced by Bob Young of Waltham, MA. The most important squash in Virginia and the Carolinas because more resistant to squash vine borers than others. "Waltham gave us wheelbarrows full," said Louis Kajawinski of Harrisburg, MO. Won 1970 AAS. *Caution: in cool summers such as 2009, 2011 and 2013 fails to ripen in northernmost areas.* Nevertheless, our best-selling winter squash variety.

1687WB Waltham ②

A=1/4oz, $1.00 **B**=1/2oz, $1.80 **C**=1oz, $3.20 **D**=4oz, $9.00
E=1lb, $26.00 **K**=5lb, $120.00

1688WO Waltham OG CCOF-certified. ③

A=1/4oz, $1.30 **B**=1/2oz, $2.50 **C**=1oz, $4.80 **D**=4oz, $13.00
E=1lb, $45.00

Miscellaneous *Moschata*

1693SO Seminole OG (110 days) Creek-speaking Seminole Indians gave it the name *chassa-howitska*, meaning "hanging pumpkin." Rated one of the ten most endangered American foods by RAFT, these buff-colored 7" teardrop-shaped squashes were cultivated by the Seminoles in the Everglades region of Florida in the 1500s. The seeds were sowed at the base of girdled trees, so that the irrepressible vines, which grow in excess of 30', climbed the trunks, allowing the fruit to hang from the bare limbs. The deep orange flesh is sweeter than butternut, superb for pies, soup and baked treats, and the key ingredient in delicious Seminole pumpkin bread. Rated third among 21 varieties in Restoring Our Seed's 2005 fall taste test, and was co-star with **#1610** Paydon in our February 2006 warehouse feast. Resistant to vine borers. Extremely hard rind must be cracked like a coconut. Stores nearly forever. A great performer in the south and along the Atlantic seaboard, it loves hot humid climates. *Probably requires too long a season to thrive in the north*, however Elisa Carbone of Hendricks, WV, advises that the immature fruits taste like extremely sweet zucchini. "Just chop them up and steam, sauté or make the most heavenly frittata ever!" QCS-certified. ②

A=1/8oz, $1.90 **B**=1/4oz, $3.50 **C**=1/2oz, $6.00 **D**=1oz, $11.00 **E**=4oz, $40.00

PUMPKINS

1/8 oz packet sows 3–8 hills, 100-280 seeds/oz. Plant 4–5 seeds/hill. Allow 6 ft. between hills. All open-pollinated except **1708 Autumn Gold** and **1710 Diablo.**

Botanically, there are no such things as pumpkins. But we know one when we see one. "Pumpkins" listed here are three species, *Cucurbita pepo* (mini pumpkins, small pie and some jack-o'-lanterns), *C. moschata* (cheeses) and *C. maxima* (jack-o'-lanterns and decorative).

Each year the Maine Pumpkin Growers Organization sponsors a Giant Pumpkin and Squash Contest. Small backyard gardeners need not apply as each single plant is estimated to need 7,000-10,000 square feet to be a serious competitor. That's only four plants to the acre! Edwin Pierpont of Jefferson, ME, with a 1,471 lb beast in 2010 is the Maine record-holder. In a feat that has been facetiously compared to Roger Bannister's first sub-four-minute mile in 1954, Ron Wallace of Greene, RI, surpassed the one-ton barrier with a new world record 2,009 lb monster in 2012. (All that heat couldn't have hurt!) For more on this culture of madness, see *Backyard Giants* by Susan Warren (ISBN 10I-59691-278-2).

1702WL Wee-B-Little (90 days) *C. p.* This triumph of miniaturization impressed the 1999 AAS judges and will please home and market gardeners and kids everywhere. Unribbed fruits are easier to decorate than Jack Be Little. Small vines (only 6–8') produce 3–4 mini 8–12 oz fruits per plant. Fruits, more upright than Jack Be Little with darker orange rind, look just like tiny pie pumpkins and could serve as such. Sturdy dark green stems provide prickle-free handles. PVP. ②

A=1/8oz, $1.90 **B**=1/4oz, $3.50 **C**=1/2oz, $6.00 **D**=1oz, $11.00 **E**=4oz, $34.00

1705JL Jack Be Little (95 days) *C. p.* Tiny ornamental pumpkins weigh only about half a pound. They're great for decorations and a big hit with kids. Good to eat, excellent stuffed. Flattened, heavily ribbed with vigorous stems. Short vines, about 3–5'. Introduced by Hollar in 1987. ②

A=1/8oz, $1.50 **B**=1/4oz, $2.60 **C**=1/2oz, $4.50 **D**=1oz, $8.00 **E**=4oz, $26.00 **K**=1lb, $90.00

1708AG Autumn Gold (98 days) *C. p.* F-1 hybrid. Even northernmost growers can vine-ripen medium-sized pumpkins with 1987 AAS Autumn Gold. Commercial growers love its "precocious yellow" gene which ensures no green pumpkins at harvest. Instead, immature fruits are yellow, ripening to a deep orange, ribbed, with good handles, 10–15 lb average. ②

A=1/8oz, $1.60 **B**=1/4oz, $2.80 **C**=1/2oz, $5.00 **D**=1oz, $9.00 **E**=4oz, $28.00 **K**=1lb, $96.00

1710DB Diablo (98 days) *C. p.* F-1 hybrid. If your pumpkin program has been out-Fox'd, maybe it's time to get a handle on it by going to the devil. Tom Fox, with its massive stocky handles has defined the recent trend in jack-o'-lanterns, but we think this devil has a more refined look; its strong 4 1/2" stems are wide at the base and taper gently upward. We liked its nicely rounded Foxy fruit shape as well as its deep orange color, its intermediate 12–22 lb size and its medium-deep ribs. Semi-determinate vines. PM tolerant. ⑤

A=1/8oz, $2.80 **B**=1/4oz, $5.50 **C**=1/2oz, $10.00 **D**=1oz, $18.00 **E**=4oz, $70.00

1711BP Baby Pam (99 days) *C. p.* Agway pie pumpkin has deep orange color and excellent uniformity. Best of all, it vine-ripens 80–90% of its fruits even in a bad squash year so it's popular among Maine commercial growers. Fruits average 3–4 lb, slightly smaller and earlier ripening than New England Pie with the same excellent quality. ②

A=1/4oz, $1.30 **B**=1/2oz, $2.40 **C**=1oz, $4.50 **D**=4oz, $9.50 **E**=1lb, $35.00

1713LU Lumina (100 days) *C. max.* Originating as a chance sport in one of Hollar's California pumpkin fields about 15 years ago, Lumina is a lustrous ivory pumpkin that kids will love, excellent for both carving and painting. Lumina stores well if not exposed to frost, so a face painted on its smooth surface will last for weeks instead of days. Under stress, the fruit may develop blue patches. Fruits 8–10" high average 12 lb, variable depending on growing conditions. Cooks like its sweet yellow flesh. Good for puréeing or making pumpkin soup. Whether you eat it, decorate it, or both, Lumina is sure to please. PVP. ②

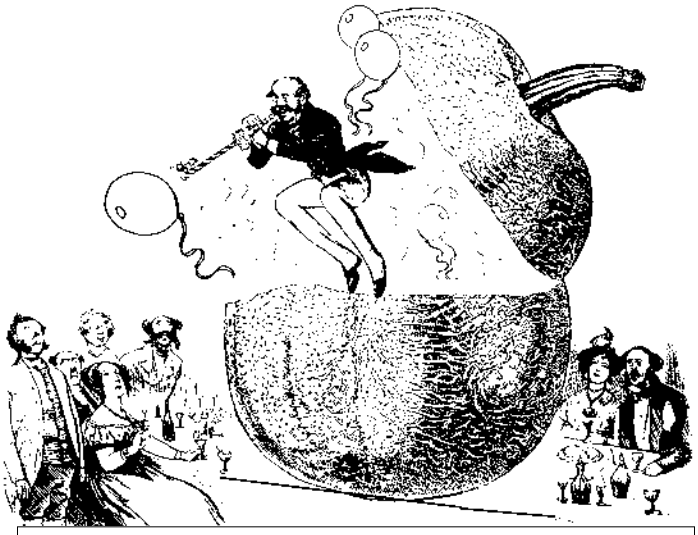
A=1/8oz, $1.70 **B**=1/4oz, $3.00 **C**=1/2oz, $5.20 **D**=1oz, $9.00 **E**=4oz, $27.00

1716JD Jarrahdale (100 days) *C. max.* Add a touch of the unusual to your squash patch with this grey-blue Australian emigré. Features 6–10 lb heavily ribbed fruits flattened on top like pumpkins, but with much sweeter moist flesh. "An excellent eating pumpkin, mild, stringless, quick to bake, easy to blend into a great pie," praises Anne Elder. Outstanding keeper. Kudos to Newport, ME, market grower Ryan Parker for his awesome specimen exhibited at this year's Common Ground Country Fair. ②③

A=1/8oz, $1.20 **B**=1/4oz, $2.20 **C**=1/2oz, $4.00 **D**=1oz, $7.00 **E**=4oz, $16.00 **K**=1lb, $42.00

1718WO Winter Luxury OG (100 days) *C. p.* Way back in 1988 when it was being maintained only by the Jung Seed Co. in Wisconsin, Mark Fulford recognized that Luxury was "3–4 times as good for pies as New England Pie." Since generating rave reviews from Amy Goldman, it has become more widely available. Uniquely russeted finely netted golden-orange skin "so beautiful…that it breaks my heart to cut one open." Trialer Heron Breen sells these "by letting people touch them…No one can keep their hands off them after that." The beauty is far more than skin deep, with Goldman calling her "flavor as fabulous as her appearance," and Elaine Carlson describing her puree as "really silken." Introduced in 1893 by Johnson & Stokes as Winter Luxury and in 1894 as Livingston's Pie Squash by A.W. Livingston's Sons. Though the original Luxury was a lemon yellow, we offer the rich orange strain first sold by Gill Bros. of Portland, OR, in 1917. Vigorous vines bear globular 7–8 lb fruits with juicy tender slightly sweet pale orange flesh. Productive, too, but somewhat delicate and only fair keepers. Goldman advises baking the pumpkin whole, pierced with a few tiny vent holes, until it slumps after about an hour at 350˚, scooping the pumpkin flesh out like ice cream and then putting it in the blender to make "the smoothest and most velvety pumpkin pie." 2 lots of held over seed, each tested at a minimum of 91%. OT, QCS-certified. ①

A=1/8oz, $1.60 **B**=1/4oz, $3.00 **C**=1/2oz, $5.50 **D**=1oz, $10.00 **E**=4oz, $30.00 **K**=1lb, $110.00



Saving squash seed is challenging.

The genus *Cucurbita* has six different species, of which three are in our catalog. (We do not offer *C. argyrosperma*, *C. ficifolia* or *C. foetidissima* and they are seldom grown in our climate.)

Different varieties within the same species will cross readily, but crossing does not occur between the different species. Seeds from a crop that has been exposed to other cucurbits of the same species won't grow true to type. If you are saving seed, you need to isolate your crop from other cucurbits of the same species by at least 1500', or protect it from insects that would bring unwanted pollen, and hand-pollinate it yourself.

New England Pie (102 days) *C. p.* Also known as Small Sugar pumpkin. Probably selected out of Connecticut Field pumpkin by early white settlers, the standard pie pumpkin for generations. A robust yielder in good seasons. One warm year, our two hills produced more than 100 lb, the 25 pumpkins, all vine-ripe, averaged 4.26 lb. During cold summers production is lower and only half will vine-ripen. However, ripening continues during curing. Bob Spencer of Harrison, ME, observed that this variety resists and survives squash bugs better than any other, even Waltham Butternut.

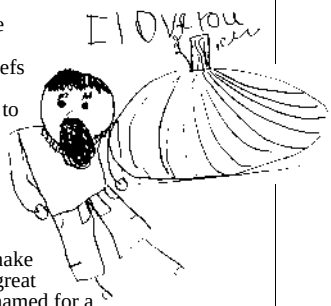
1719NE New England Pie ②③
A=1/4oz, 90¢ **B**=1/2oz, $1.60 **C**=1oz, $2.60 **D**=4oz, $5.50
E=1lb, $17.00 **K**=5lb, $80.00

1720NO New England Pie OG CCOF-certified. ③
A=1/4oz, $1.30 **B**=1/2oz, $2.50 **C**=1oz, $4.80 **D**=4oz, $12.00
E=1lb, $42.00

1723LO Long Pie OG (102 days) *C. p.* Has developed quite a following in recent years, generating such comments as "If the Long Pie pumpkins are out, I will cry." Burpee offered it in 1888 as St. George, though likely it is far older. It remains the best pumpkin for Yankee pumpkin pies. Though widely grown in Androscoggin County 60 years ago (an old-timer remembers them stacked up on porches like firewood), it almost became extinct. LeRoy Souther, a Livermore Falls, ME, native who maintained it for more than 30 years, brought seeds to cucurbit aficionado John Navazio at his Common Ground Fair squash booth in the late 1980s. Navazio exhibited one at the 1988 Fair, then reintroduced it to commerce through Garden City Seeds in Montana. 3–5 lb fruits look like overgrown zucchinis to the uninitiated, but the telltale sign is an orange spot where the otherwise all-green elongated fruit rested on the ground. Vines have enormous vigor that has been increased through selection by our seed growers. Can achieve astonishing yields. In 2007 I harvested 15 fruits averaging 4 lb each from just two hills! In storage, the whole fruit first blushes, then glows bright orange, signaling that its delicious flesh is ready to be turned into incomparable pies. One of the best for continued ripening after picking, Long Pie stored at 50˚ keeps all winter. Germinates poorly in cold soil. The little immature fruit under 5" long at the end of the season make great summer squash. We have plenty of seed; there will be no tears this year. VOF-certified. ①③

A=1/8oz, $1.80 **B**=1/4oz, $3.50 **C**=1/2oz, $6.00 **D**=1oz, $10.00
E=4oz, $35.00 **K**=1lb, $120.00

1727RV Rouge Vif d'Étampes (105 days) *C. max.* Also known as Cinderella. Goldman says it "coasts on its looks alone…insipid and watery." "Not so," dissents Donna Fraser-Leary of Charlotte, VT. "You do this…versatile pumpkin an injustice…While their flavor is somewhat milder than a winter squash and the texture somewhat fibrous, they possess a pleasant flavor. My daughter and I like it so much, we steam the pumpkin and eat it still in the shell. I use it in all my favorite recipes that call for squash or pumpkin." Rosalind Creasy says chefs in France use it as a base in their vegetable stock and bake garlic, onions and leeks in the pumpkin to scoop right from the shell into a Swiss cheese leek soup. While folks may disagree about its eating quality (I fall closer to Goldman's camp), no one can gainsay its spectacular beauty. This French heirloom turns the pumpkin patch into a glowing blaze with its decorative deeply ridged burnt-orange to red 7–30 lb flattened fruits that make great decorations. Because of its thin skin, not a great keeper. Originated in France in the early 1800s, named for a town south of Paris. Introduced to the U.S. by Burpee in 1883. ③



A=1/8oz, $1.30 **B**=1/4oz, $2.20 **C**=1/2oz, $4.00 **D**=1oz, $7.00
E=4oz, $20.00 **K**=1lb, $60.00

1729YO Young's Beauty OG (105 days) *C. p.* Unimpressed by #**1708** Autumn Gold's "precocious yellow" gene? Don't care for its tendency to produce irregularly shaped fruit? Prefer a classic mid-sized open-pollinated pumpkin that usually ripens perfect brilliant deep orange globes? Try Young's Beauty. Expect good production of uniform hard-skinned thick-fleshed 10–12 pounders that make good pies. All seed is held over; tested at 90%. *Caution: May not ripen in northernmost areas.* MOFGA-certified. ①

A=1/8oz, $1.40 **B**=1/4oz, $2.60 **C**=1/2oz, $4.20 **D**=1oz, $7.50
E=4oz, $23.00

Weight equivalents		
1/16 oz	=	1.77 grams
1/8 oz	=	3.55 grams
1/4 oz	=	7.1 grams
1/2 oz	=	14.2 grams
1 oz	=	28.4 grams
4 oz	=	113.5 grams
1 lb	=	453.6 grams
2.2 lb	=	1000 grams

1740CH Cheese (110 days) *C. mos.* These handsome 6–12 lb wide-ribbed flattened tan fruits look like big wheels of cheese. Identified by Hedrick in *Cucurbits of New York* (1937) as "one of the oldest varieties cultivated in America," a distinctive group which has "remained remarkably stable." Introduced to commerce in 1807 by McMahon. Some folks call this variety Long Island Cheese because it was once the preferred pumpkin for pies in New York, New Jersey and on the island. Bright orange meat is coarse and quite fibrous, but its tender sweetness redeems its textural deficiencies and it does not deserve Hedrick's terse dismissal: "quality poor." Good for baking, deep cavity lends itself to stuffing. We have found it to be a dependable producer even in our climate and unmatched as a good keeper. Ryan Parker exhibited a beauty at the Fair this year. Paul Hauser's family in PA has maintained this variety for many years. ③

A=1/8oz, $1.40 **B**=1/4oz, $2.40 **C**=1/2oz, $4.00 **D**=1oz, $7.00
E=4oz, $22.00

Lady Godiva (110 days) *C. p.* At press time we could not be certain whether we would have this naked-seeded pumpkin available. Please check our website for availability, price and description. Go naked!

1748CF Connecticut Field (115 days) *C. p.* Also known as Big Tom. Grown for jack-o'-lanterns and stock feed, gets 15–25 lb, sometimes more. Not uniform in size or shape. Heirloom grown by Native Americans, adopted by colonists before 1700, and a staple of 19th-century catalogs. Vick's offered for 10¢ an oz. and 50¢ per lb in 1877. *Ripens for us in good years, but often we must pick green.* ③

A=1/4oz, 90¢ **B**=1/2oz, $1.60 **C**=1oz, $2.80
D=4oz, $5.50 **E**=1lb, $20.00 **K**=5lb, $95.00

Howden (115 days) *C. p.* For 40 years Howden's symmetrical fruits with hard ridged skin and thick flesh have set the standard for large round jack-o'-lanterns. Now so much a New England tradition that Kimberly Mastrianni of Langdon, NH, "hands out Howden seeds at our town meeting so people can plant them and bring the pumpkins to our annual Fall Festival." Large spreading vines produce 4–6 fruits per plant, typically much more uniform than Connecticut Field while weighing 20–35 lb, often able to ripen fully in our climate. Developed by John Howden in Massachusetts and introduced by Harris Moran in 1973. Tolerant to BR.

1751HW Howden ②
A=1/8oz, $1.00 **B**=1/4oz, $1.80 **C**=1/2oz, $2.80 **D**=1oz, $5.00
E=4oz, $10.00 **K**=1lb, $36.00

1752HO Howden OG ICS -certified. ①
A=1/8oz, $1.40 **B**=1/4oz, $2.50 **C**=1/2oz, $4.00 **D**=1oz, $7.50
E=4oz, $16.00 **K**=1lb, $58.00

1757BM Big Max (120 days) *C. max.* These are big pumpkins. Not big enough to compete in the giant pumpkin contests (you'd need Dill's Atlantic Giant, not offered by us) but certainly sufficient for exhibiting in your county fair or for displaying as an awesome jack-o'-lantern. Typically weighs 50–100 lb and measures up to 70" in circumference! ②

A=1/4oz, $1.10 **B**=1/2oz, $2.00 **C**=1oz, $3.60 **D**=4oz, $7.50
E=1lb, $27.00

"This is only my second year at starting my own vegetable plants, and you are fast becoming one of my favorite catalogs to order from! I love reading your descriptions! Your low prices and shipping charge is also a huge plus."
–Linda Yoder, Burton, OH

GAMBOLING GOURDS

All gourds are open-pollinated. Gourds come in two major categories (Luffa is a third). The small ones are *Cucurbita pepo* var. *ovifera*, known as ornamental gourds for their variety of shapes, colors and surfaces. These vigorous viners will usually mature in our climate if direct-seeded. The larger ones are *Lagenaria siceraria* or hardshell gourds, named from the Greek *lagenos,* a flask, and *sicera*, an intoxicating drink. *Lagenaria*, though lacking the color range of their smaller cousins, fascinate with their magical shapes. Because of their long season they must be started indoors in our climate. To improve germination, sandpaper or clip off the radicle end and soak the seed. They resent transplanting and will grow slowly for a few weeks. Once they take off these rampant crawlers are noted for their enormous foliage, more velvety in texture than that of other cucurbits, and their large white almost luminous night-blooming flowers. Heavy feeders, they will take up huge amounts of garden space unless trellised. If you cut off the spent female flowers daily, they make an excellent, albeit malodorous, flowering vine.

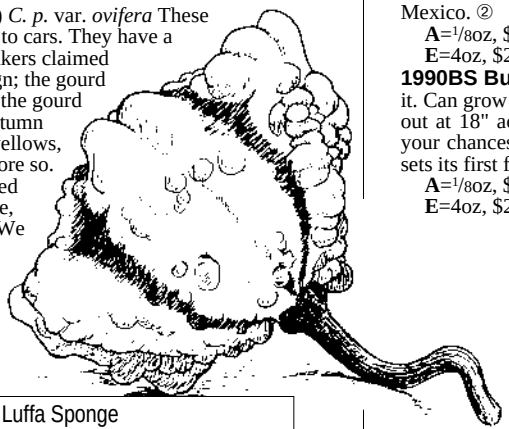
1909DO Tennessee Dancing Gourd OG (93 days) *C. p.* var. *ovifera* Anyone who sees these tiny 2–3" adorable green-and-white striped bottle gourds falls in love with them. They generated quite a buzz at our Common Ground Fair booth exhibit. We received a nice letter from Junior Gordon of Primm Springs, TN, the original source for this delightful conversation piece. Gordon says these are better known as spinning gourds and advises us to select our seed crops for short, fairly thick straight necks and to rogue out those with the longer crooked necks that won't spin as well. To spin them "take the neck between your middle finger and thumb and snap your fingers with a quick action." Kids in Tennessee used to bring them to school as toys. Rampant vines are extremely prolific producers of the small fruits. Hard shells dry to tan color. MOSA-certified. ②
A=1/8oz, $2.10 **B**=1/4oz, $3.80 **C**=1/2oz, $7.20 **D**=1oz, $13.00 **E**=4oz, $45.00

1912SM Small Ornamental Mix (95 days) *C. p.* var. *ovifera* Eight kinds of early-maturing types, with small spoon, bicolored pear, and small orange most prevalent. ②
A=1/8oz, $1.60 **B**=1/4oz, $2.80 **C**=1/2oz, $4.50 **D**=1oz, $8.00 **E**=4oz, $28.00

1939PW Professional Small Warted Mix (95 days) *C. p.* var. *ovifera* A balanced assortment of flats, rounds, short pears, pears and spoons in a variety of solid, striped and bicolor patterns. Yellows, greens, oranges and whites make a bright display. We love them, warts and all. ②
A=1/8oz, $1.60 **B**=1/4oz, $2.80 **C**=1/2oz, $4.80 **D**=1oz, $8.50 **E**=4oz, $28.00

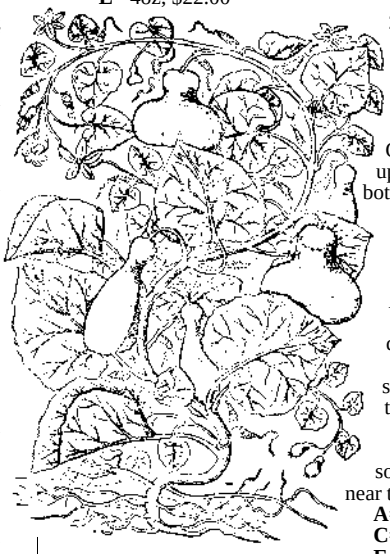
1952CT Shenot Crown of Thorns (95 days) *C. p.* var. *ovifera* Small gourds with pointed ribs that look like teeth. Sometimes called Ten Commandments because the finger-like projections always number ten or Ghost Gourd because their white cream color and weird shape make them ghastly. Kids love to paint on their smooth surfaces for Halloween decorations. ②
A=1/8oz, $1.60 **B**=1/4oz, $2.80 **C**=1/2oz, $4.50 **D**=1oz, $8.00 **E**=4oz, $28.00

1957AW Autumn Wings (100 days) *C. p.* var. *ovifera* These are to gourds as the 1957 Cadillac was to cars. They have a double set of fins or wings. The car makers claimed aerodynamic advantages for their design; the gourd breeders make no such assertion. Both the gourd and the car are highly conspicuous. Autumn Wings' colors, a vivid mix of greens, yellows, creams and whites, make them even more so. Some of these gourds are straight necked and others are curved. They vary in size, too, although most are 6–8" in length. We stop short of claiming them to be the Cadillac of gourds, but bet they'll make a good roadside stand attraction. ②
A=1/8oz, $2.10 **B**=1/4oz, $4.00 **C**=1/2oz, $6.50 **D**=1oz, $11.00 **E**=4oz, $42.00



1962LU Luffa (110 days) *Luffa aegyptiaca* May be more closely related to the cucumber than to the hardshell Lagenaria. Also known as Dishrag Gourd, dried and used for making bath sponges. Some folks pick them young, steam and panfry them. In addition to being a scrubber and a comestible, this versatile gourd has been used to make soundproof wall boarding, to insulate army helmets, to stuff mattresses and saddles and even to make filters for steam engines and diesel motors! *Caution: Luffa requires a long season. Start indoors and culture like melons.* We recommend trellising if you want your luffas to remain straight. ②
A=1/8oz, $1.30 **B**=1/4oz, $2.20 **C**=1/2oz, $3.60 **D**=1oz, $6.00 **E**=4oz, $16.00

1963SG Speckled Apple (110 days) *Lagenaria siceraria* A prime specimen on exhibit at the 1999 Common Ground Fair won our hearts. Then this year Amy LeBlanc's exhibit reminded us of why we love these. Shaped like a Red Delicious apple blown up to three times normal size, these gourds sit up on four points with dimples in between. Mostly green with some white splotches. ②
A=1/8oz, $1.60 **B**=1/4oz, $3.00 **C**=1/2oz, $5.00 **D**=1oz, $7.50 **E**= 4oz, $22.00

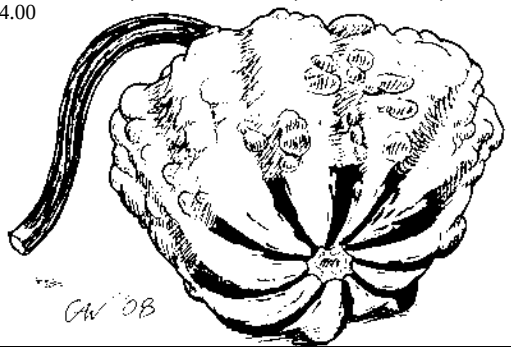


1966LB Large Bottle or Birdhouse (120 days) *L. s.* Rampant crawling vines produce large gourds with bulbous base and narrow neck, usually with a bulge at the stem end. Grow 14" tall and up to one foot in diameter. Green rind turns white or starts to brown upon maturity. When dried, make durable bottles or birdhouses. ②
A=1/8oz, $1.50 **B**=1/4oz, $2.60 **C**=1/2oz, $4.50 **D**=1oz, $7.50 **E**=4oz, $22.00

1968SP Speckled Swan (120 days) *L. s.* Common Ground fairgoers gawked at these show-stealers in Jack Kertesz' demonstration garden. At our booth they admired Swan's beautiful dark-green surface with very pale green 1" splotches that bleed like strokes from a paintbrush. Large round 8–10" base tapers into graceful long neck, sometimes straight, sometimes arched, capped by a small bulb near the stem that looks like a swan's head. ②
A=1/8oz, $1.60 **B**=1/4oz, $3.00 **C**=1/2oz, $5.00 **D**=1oz, $7.50 **E**=4oz, $22.00

1974CC Corsican Canteen (125 days) *L. s.* Sets 3–6 fruits per plant, shaped like an old-fashioned canteen with height of 3 1/2" and a 7" diameter, some larger. Will make lovely lidded bowls. Amy LeBlanc's exhibit at this year's Common Ground was the best and largest of these I've ever seen. She starts them in her hoophouse. Originally from Native Americans in New Mexico. ②
A=1/8oz, $1.60 **B**=1/4oz, $3.00 **C**=1/2oz, $4.80 **D**=1oz, $8.50 **E**=4oz, $26.00

1990BS Bushel (135 days) *L. s.* Shaped like a large bowl with a pot lid on it. Can grow enormous given sufficient heat, but in Maine will probably max out at 18" across. *Caution: requires a long season to mature.* To improve your chances limit each vine to one fruit. Prune to halt vine growth after it sets its first fruit. ②
A=1/8oz, $1.50 **B**=1/4oz, $2.60 **C**=1/2oz, $4.50 **D**=1oz, $8.00 **E**=4oz, $24.00



How to Produce a Luffa Sponge

When luffas are ripe their skins turn brown and dry and stems turn yellow. Check your plants frequently and harvest only ripe gourds. Full-sized fruit that are still green produce soft, fine-textured sponges that don't last. After the first killing frost remove any nearly ripe gourds to a warm well-ventilated place to allow them to dry. Gourds left wet for long will readily discolor.

If the luffa has just ripened, gently squeeze and pop its skin. Break the blossom end cap and pull the vascular bundle (that's the sponge!) up the side of the gourd like a zipper. The sponge will pop out, wet and white. Quickly rinse it in water to prevent oxidation.

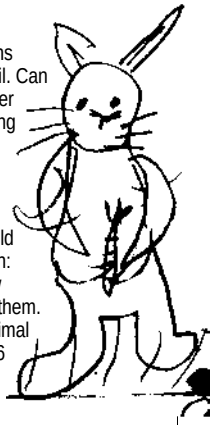
If gourds are too dry to pop the sponge out, ret them (thoroughly soak in water) for several days until the skin sloughs off leaving only the spongy fiber. After retting, shape and dry the sponge. Remove seeds either before or after retting. We found it easy to do before retting: cut open the larger end of the gourd and either shake or rinse out the seeds. If you wish to whiten the sponges, bleach by soaking either in a 10% bleach solution or in hydrogen peroxide. Rinse luffas thoroughly in clean water and dry before use.

Curing Lagenaria Gourds is Easy.

Hardshell gourds are 90% water at harvest. They need to be cured or dried, a slow process of evaporation through the outer shell, which is covered by a thin ivory-green skin. Curing can take 6 weeks to 1 year (average time 4 months) depending on gourd size, thickness of shell, weather and storage conditions.

Immature gourds (that have not developed a thick shell) will rot after harvest. Mature gourds are large and weighty. To cure, store off the ground in a well-ventilated room or unheated outbuilding. For a smooth beige surface, scrape off the outer skin after it loosens and darkens. (Freezing and thawing loosens the outer skin.) Outer skin, if left on, may become moldy; mold-patterned skin will dry to the gourd shell and can be sanded off, painted over or incorporated into the decoration.

CARROTS *Daucus carota*



Per capita consumption of carrots has tripled since 1975 to 12 lb annually. Carrots average 18,000 seeds/oz with significant variations among varieties. Very hardy. Early carrots can be sown by late April. Can take up to 3 weeks to germinate; keep rows from drying out for faster emergence. Sow carrots for winter storage in mid-late June. Thinning is critical: At 3" high thin to 1/2" apart, at 6" thin again to 1" apart.

Pelleted carrot seed? Not this year. Two factors are holding us back: 1) Insufficient sales. 13 lb is the minimum lot we can pellet economically. We sell only 17 lb of Mokum, our best-selling hybrid. 2) Pelleting reduces the length of seed viability. Pelleted seed should be sowed the same year as purchased. For our future consideration: Send a note or comment accompanying your order and let us know which varieties and how many pellets you'd purchase if we carried them.

Minimal germination temperature 40˚, optimal range 60–85˚, optimal temperature 80˚, emergence takes 17 days at 50˚, 10 days at 59˚, 6 days at 77˚, 48% normal seedlings at 41˚, 96% normal at 68˚.

Open-pollinated CARROTS

1/8 oz packet sows 35 ft; 1 oz 280 ft.

2018TP Tonda di Parigi (55 days) A round Parisian-type carrot that we prefer to the old Thumbelina. At 1 1/2" Tonda is slightly longer than Thumbelina with deep orange color and improved taste. Tondas are best harvested when they are young and tender and very sweet. Enjoy them cooked to maximize their sweetness and to elicit their superb creamy texture. The easiest carrot to grow if you have heavy clay soil. 19th-century heirloom from Paris. **BACK!** ②

A=1/8oz, $1.30 **B**=1/2oz, $4.00 **C**=1oz, $7.00 **D**=4oz, $22.00 **E**=1lb, $80.00

2024AM Amsterdam #2 (55 days) Amsterdam's slender tapered 6–7" roots are longer, less stubby and develop better color at a younger stage than Minicor's. Ideal for succession plantings of baby carrots throughout the summer, provided they are given adequate moisture. Not particularly sweet but with a carroty sharpness that leaves a pleasant taste sensation. Crisp and tender with a small core. ②

A=1/8oz, $1.30 **B**=1/2oz, $4.50 **C**=1oz, $7.50 **D**=4oz, $20.00 **E**=1lb, $70.00

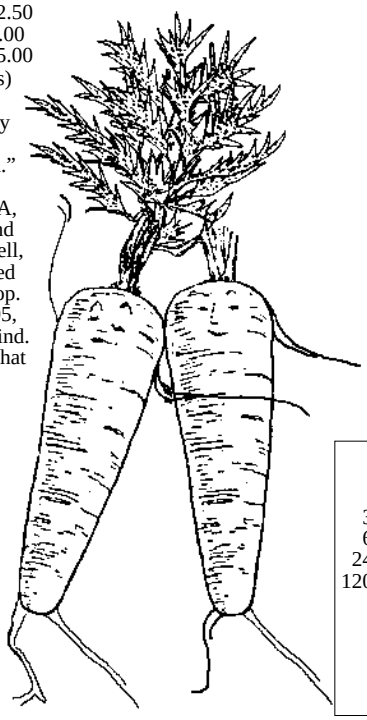
2042SN Scarlet Nantes (68 days) This old-time favorite Nantes variety with bright orange roots averaging 6–7" proves that good quality is not always expensive. Sweet with a small dark core. Received a high overall score in the 2005 Oregon State University trials. Has been our best-selling carrot in recent years. ②

A=1/8oz, 90¢ **B**=1/2oz, $2.50 **C**=1oz, $4.00 **D**=4oz, $8.00 **E**=1lb, $20.00 **K**=5lb, $95.00

Nantes Fancy OG (68 days) Crop failure. *Not available in 2014.*

2058RC Red Cored Chantenay (70 days) According to William Woys Weaver, this heirloom originated in France around 1879 and "needs no improvement." Produces 5–7" thick red-orange roots that have had excellent carroty flavor in our September taste tests. Dependable performer does well in heavy soils. The storage carrot of choice for Jay and Polly Armour of Four Winds Farm in Gardiner, NY. Devoted customers at their monthly winter markets esteem its taste. ②

A=1/8oz, 90¢ **B**=1/2oz, $2.50 **C**=1oz, $4.00 **D**=4oz, $8.00 **E**=1lb, $20.00 **K**=5lb, $95.00



2060RO Rumba OG (72 days) Who will have this dance? Line-stocker extraordinaire Gary Athenian will. He calls Rumba "the best carrot I've ever grown." When he brought it to Nash's Organic Produce in Sequim, WA, they admired its crisp texture and adopted it as their favorite as well, no small distinction as they breed carrots, their most important crop. Last offered by Johnny's in 2005, Rumba has since been hard to find. A straight tapered Nantes type that matures slowly and resists oversizing, it is great for fall harvest and winter storage. Its aromatic strong carrot flavor is admittedly not for everyone. Though Roberta also likes it, Gene and CR demur. But then again, not everyone can rumba. WA-certified. ① **NEW!**

A=1g, $1.80 **B**=3g, $4.20 **C**=6g, $7.50 **D**=24g, $20.00 **E**=120g, $90.00

2063YS Yellowstone (72 days) "Delighted by the many colors of carrots you sell now. Each has its own flavor (and its own complement of antioxidants). I can't tell you how happy they make me in the cold heart of winter glowing on my plate," exults Hillary Nelson of Canterbury, NH. An example of this diversity, Yellowstone boasts a crisp clean flavor that has shown up well in our recent taste tests. Big-shouldered roots with large greenish-yellow cores grow up to 8" long, averaging 7". Productive in a wide variety of soils. Research shows that yellow carrots contain xanthophylls, pigments similar to beta carotene, that help develop healthy eyes and may help prevent lung and other cancers. ④

A=1g, $1.80 **B**=3g, $4.20 **C**=6g, $7.50 **D**=24g, $20.00 **E**=120g, $90.00

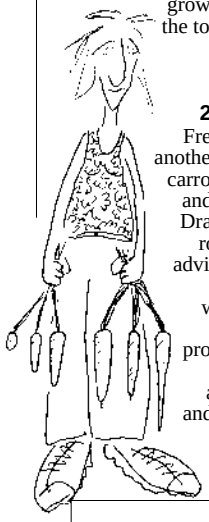
2068AO Atomic Red OG (74 days) Atomic Red is really red with a hint of purple on the outside of the 4–6" cylindrical roots. Slice it open to rings of color, the red rind giving way to a deep orange interior with a lighter core. Even the stems and tops show red. Roots taste mild and sweet when raw. Keeps its color when cooked and develops a yummy carroty sweetness with no harshness. But taste is pure bonus. Color packs the wallop here, color that could make your sales explode. Susceptible to P. CCOF-certified. ③

A=1g, $1.60 **B**=3g, $4.20 **C**=6g, $6.50 **D**=24g, $15.00 **E**=120g, $70.00

2073SK Shin Kuroda 5" (75 days) Over the years we've enjoyed several strains of the stump-rooted Japanese-type carrots that are so popular in Asian markets. *Shin* means 'new' in Japanese. Tender sweet Shin Kuroda scored high in our October taste test, and also impressed us with its bright orange color. These Kurodas, developed from the old Chantenay type, do well in a wide range of soil and weather conditions. ②

A=1/8oz, 90¢ **B**=1/2oz, $2.50 **C**=1oz, $4.00 **D**=4oz, $8.00 **E**=1lb, $20.00 **K**=5lb, $95.00

2076DO Danvers OG (75 days) The original Danvers Half-Long was developed by market gardeners in Massachusetts in 1871. This modern improvement features 7" conical orange roots that taper to a point. Easier to grow in heavy soils than the longer more refined types. Broader at the top and more fibrous than the Nantes varieties. Outstanding for cooking and winter storage. CCOF-certified. ③



A=1/8oz, $1.20 **B**=1/2oz, $4.00 **C**=1oz, $7.50 **D**=4oz, $16.00 **E**=1lb, $59.00 **K**=5lb, $290.00

2078JD Jaune du Doubs (78 days) I like this 19th-century French heirloom best of all the yellow carrots. Holli Cederholm, another admirer, calls it "a mainstay in her open-pollinated rainbow carrot bunches," and reports it performed beautifully on her heavy and rocky new ground—with fewer culls than #**2076** Danvers or Dragon. Not everyone agrees. Some are put off by its sometimes rough unrefined appearance and variable taste and texture. We advise working your seed bed well before sowing to avoid forked or shallow roots. The plants have the kind of dense rampant wildness that has been tamed out of the newer hybrids, so thin them more rigorously than other varieties. Well-grown they produce smooth conical 5–8" yellow roots, showing slight green shoulders and good core color. Better flavor cooked than raw and retains good color. Cederholm reports the roots stay crisp and crunchy in storage for tri-colored carrot slaw all winter. ②⑤

A=1/8oz, $1.60 **B**=1/2oz, $5.00 **C**=1oz, $8.00 **D**=4oz, $26.00 **E**=1lb, $100.00

MEMBER SPECIAL

Offered first come, first served to Fedco Co-op members only!

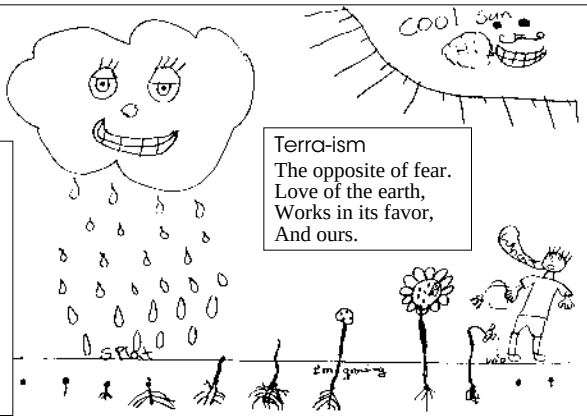
See page 7 to join our cooperative with your order.

2079KO Scarlet Keeper OG (85 days) A stalwart storage carrot and difficult-to-produce biennial seed crop. These 7–9" heavy cylindrical roots with broad red shoulders, large deep orange cores and blunt tips are without peer when they come out of the root cellar in March, even though they are not our first choice for fresh fall eating. Good for juicing, too. In a taste test at our warehouse its juice quality was comparable to that of our old favorite #**2086** Mokum. All our seed is held over and tests at 85%. MT-certified. ①

A=1g, $1.40 **B**=3g, $3.50 **C**=6g, $6.00

Weight equivalents

1 gram =	.035 oz
3 grams =	.106 oz
6 grams =	.212 oz
24 grams =	.851 oz
120 grams =	4.24 oz
1/16 oz =	1.77 g
1/8 oz =	3.55 g
1/4 oz =	7.09 g
1/2 oz =	14.2 g
1 oz =	28.4 g



Terra-ism

The opposite of fear.
Love of the earth,
Works in its favor,
And ours.

Hybrid CARROTS

1 gram packet sows about 10 ft.

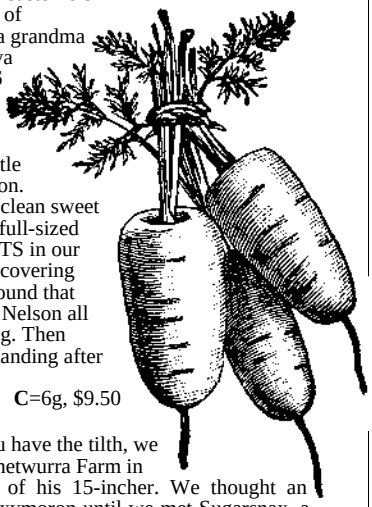
2086MK Mokum (48 days) Arguably the tastiest carrot for fresh eating in late spring and summer. Repeat winner of our summer taste tests. Mokum's earliness, slenderness and sweetness transcend its flaws. Blunt Amsterdam-type that sizes extremely quickly with short weak tops. Should be harvested at 5–6" before the roots push out of the ground and develop green shoulders. Although not a versatile full-season carrot, Mokum merits succession planting so you can enjoy it young throughout the summer. Always the first to disappear from our spring patch. Susceptible to ALTS at our Colrain, MA, plot in 2009 and 2012 but not in 2010. ④

A=1g, $1.90 **B**=3g, $4.50 **C**=6g, $7.50 **D**=24g, $25.00 **E**=120g, $110.00

2092NL Nelson (56 days) Twin Oaks Coop in Virginia rates Nelson the best in hot weather when it is hard to get tasty carrots. Sweet carroty Nantes-type stays tender and crisp under a variety of growing conditions. Smooth and uniform, 6–7" cylindrical blunt roots with deep orange color have won the widespread endorsement of commercial growers and home gardeners. Strong tops make it suitable for summer bunching. Widely grown in Europe; the seed comes from Bejo in Holland. Susceptible to ALTS in 2012. ④

A=1g, $1.90 **B**=3g, $4.50 **C**=6g, $7.50 **D**=24g, $25.00 **E**=120g, $110.00

2093YO Yaya OG (58 days) Several customers informed us that Yaya is a Greek term of endearment for grandmother. Not yet a grandma in the carrot world, relatively new Yaya is in the same quality class with #**2086** Mokum and #**2092** Nelson, a standout three straight years in our observation plots. Slightly shorter-rooted than Nantes Fancy but more flavorful. A little smoother and more uniform than Nelson. Strong tops, good for bunching. Crisp clean sweet carrot flavor. Can be used for baby or full-sized carrots. Showed some tolerance to ALTS in our 2009 MA plot. In their blind taste test covering two seasons, Katie and Joel Wolpert found that Yaya had superior flavor compared to Nelson all through the summer until Thanksgiving. Then Nelson turned the tables and was outstanding after Thanksgiving. OT-certified. ④



A=1g, $2.10 **B**=3g, $5.50 **C**=6g, $9.50 **D**=24g, $30.00 **E**=120g, $140.00

2094SS Sugarsnax (68 days) If you have the tilth, we have the carrot. Tom Hodgson of Wishetwurra Farm in W. Tisbury, MA, sent us a picture of his 15-incher. We thought an Imperator carrot with flavor was an oxymoron until we met Sugarsnax, a fresh-market standout with long slender beautiful deep orange roots ideal for bunching. In average conditions more likely to grow 9" than 15. Outstanding in trials and taste tests, it has a tender sweetness that keeps you coming back for more. Tolerant to ALTS, CLS and P. ⑤

A=1g, $1.50 **B**=3g, $3.50 **C**=6g, $6.50 **D**=24g, $18.00 **E**=120g, $80.00

2096PH Purple Haze (70 days) We like 2006 AAS winner Purple Haze much better than Purple Dragon. Enhanced by a texture almost as refined as the best orange carrots, it has none of Dragon's harshness. Purple with orange stretch marks and a vivid orange core, Haze will really draw crowds to your stand. Though its raw flavor is average, it improves with cooking, despite losing some of its color. The 7" tapered roots store fairly well. This first purple Imperator-type carrot may make you want to kiss the sky! ④

A=1g, $2.40 **B**=3g, $6.50 **C**=6g, $11.00 **D**=24g, $38.00 **E**=120g, $180.00

2097WS White Satin (70 days) Satin is by far the best white carrot we've trialed. Hillary Nelson says its classic 8" roots are "some of the most perfect looking carrots I've grown—straight and long," with the ideal carrot shape in a pleasing creamy white. Sweet and crunchy when eaten raw, it has none of the wild carrot taste or hairiness typical of other white carrots. When cooked it is sweet and mild with a smooth texture. Develops 1" green shoulders when mature. Medium core. ④

A=1g, $2.40 **B**=3g, $6.50 **C**=6g, $11.00 **D**=24g, $36.00 **E**=120g, $170.00

2099OR Over the Rainbow Mix (48-75 days) If there's a better carrot mix than this one, it must be somewhere over the rainbow, way up high. We took a good formula called Rainbow Mix, especially strong in the lighter shades of yellow and orange, and boosted it with our own choice of dark orange, purple and red varieties. In doing so, we sacrificed some of the uniformity our European supplier maintains, so not all the roots are perfectly slender and tapered. But oh the colors! ④

A=1g, $2.40 **B**=3g, $6.50 **C**=6g, $11.00 **D**=24g, $36.00 **E**=120g, $170.00

BEETS *Beta vulgaris*

1/8 oz packet sows 20 ft, 1 oz about 160 ft. All open-pollinated except #2121. Hardy. Can be sown almost as soon as ground can be worked. Thin by harvesting greens with baby beets. Beets left to mature to full size should be at least 3" apart. Minimum germination temperature 40˚, optimal range 60–85˚, optimal temperature 77˚, emergence takes 17 days at 50˚, 10 days at 59˚, 5 days at 77˚, highest % of normal seedlings at 77˚.

Early Wonder Tall Top (48 days) The beet that can't be beat in our customers' estimation. We sold more than 6,000 packets, a whopping 470 lb of seed. Selected for earliness from Crosby's Egyptian and introduced in 1911. Quick emergence in cold soil and attractive purple tops make Wonder the choice for early beet greens and bunching beets. Both home gardeners (scarfed up 3,513 size-A) and commercial growers (bought 177 1-pounders and 15 5-pounders) like Early Wonder. In their 1916 catalog F.H. Woodruff & Sons of Medford, CT, claimed to be the largest beet-seed growers in the U.S. and the originators of Early Wonder.

2108EW Early Wonder Tall Top ③

A=1/8oz, 80¢ **B**=1/2oz, $1.20 **C**=1oz, $2.20 **D**=4oz, $4.00 **E**=1lb, $13.00 **K**=5lb, $60.00

2109WO Early Wonder Tall Top OG CCOF-certified. ③

A=1/8oz, $1.00 **B**=1/2oz, $1.80 **C**=1oz, $3.30 **D**=4oz, $7.50 **E**=1lb, $25.00 **K**=5lb, $120.00

2121RO Red Ace OG (50 days) F-1 hybrid. Sweet early season beet with purple tops. Market growers appreciate its uniformity and perfect shape, which is very similar to Early Wonder but more refined. We are well-stocked so there won't be any back-orders. Tolerant to CLS. WA-certified. ⑤

A=1/8oz, $2.00 **B**=1/2oz, $6.00 **C**=1oz, $10.00 **D**=4oz, $36.00 **E**=1lb, $140.00

2128GO 3 Root Grex OG (54 days) The genius of Alan Kapuler at work, this is an interbreeding mix of three heirlooms: Yellow Intermediate, Crosby Purple Egyptian and Lutz Saladleaf. It absolutely wowed me in the trial and got raves at our Common Ground Fair booth. There are three distinct colors in this gene pool: a pinkish red with some orange in it, a bright gold, and a beautiful iridescent orange. We were impressed by the unusual vigor, glowing colors and length of these gradually tapered elongated roots. The Lutz influence manifests in their size, as much as 3 1/2" across and 7–8" long. "Gave us the best beet crop we have ever grown in our gardens here," boasted Deborah Klippert of Kersey, CO. OT-certified. ①

A=1/8oz, $1.60 **B**=1/2oz, $4.20 **C**=1oz, $7.50 **D**=4oz, $22.00 **E**=1lb, $80.00

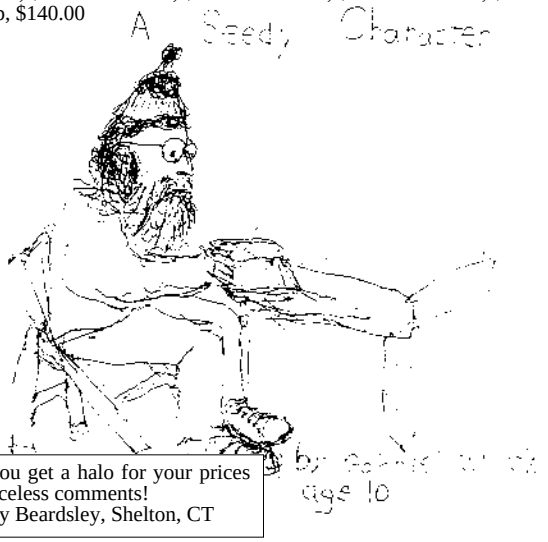
Chioggia (55 days) Also known as Bassano, for the Venetian hill town in which it originated. Has been cultivated in the States since the 1840s, was listed by Fearing Burr in 1863, and offered by Vick's for 75¢ per lb in 1877. Beautiful when sliced, this heirloom home-garden type attracts attention in the kitchen with its alternating interior rings of pink and white. Noteworthy also for its light red exterior color, green tops and exceptional sweetness. It loses quality when it gets large. Anne Elder reported that her plants were sufficiently vigorous to withstand an invasion of galinsoga.

2136CH Chioggia ②

A=1/8oz, $1.00 **B**=1/2oz, $1.80 **C**=1oz, $3.50 **D**=4oz, $8.50 **E**=1lb, $25.00

2137CO Chioggia Guardsmark OG WA-certified. ⑤

A=1/8oz, $2.00 **B**=1/2oz, $6.00 **C**=1oz, $10.00 **D**=4oz, $36.00 **E**=1lb, $140.00



"CR, you get a halo for your prices and priceless comments!
–Guy Beardsley, Shelton, CT

2144GO Golden Detroit OG (55 days) Sweet and delicious golden beets. Better size, vigor, taste and disease resistance than Burpee's Golden Beet. Despite its name, does not have the classic round Detroit shape. Instead, more elongated like a pyramid. No green shoulders. Good sales have earned it a place in our catalog alongside #**2149** Touchstone Gold. All our seed is held over. CCOF-certified. ③
A=1/8oz, $2.00 **B**=1/2oz, $6.00 **C**=1oz, $10.00 **D**=4oz, $34.00 **E**=1lb, $120.00

2149TO Touchstone Gold OG (55 days) The most refined and reliable golden beet. Much more dependable germination and uniformly round roots than others we've tried. Resists zoning. Like other golden beets, retains its color when cooked and has the sweet flavor prized by aficionadoes. Performed well even when overcrowded in my trial. Takes the guesswork out of growing golden beets. "The first gold beet that's ever done well for us," reports Janine Welsby. Ample seed is already on hand for early orders. WA-certified. ⑤
A=1/8oz, $2.10 **B**=1/2oz, $6.50 **C**=1oz, $12.00 **D**=4oz, $40.00 **E**=1lb, $155.00

2156CY Cylindra (56 days) Also known as Forono and Formanova, this cylindrical beet, good for pickling or processing, grows 6" long. Roberta rates them the darkest and least fibrous of our beets. Heirloom from the 1880s, originally from Denmark. ②
A=1/8oz, 80¢ **B**=1/2oz, $1.30 **C**=1oz, $2.40 **D**=4oz, $5.50 **E**=1lb, $17.00 **K**=5lb, $80.00

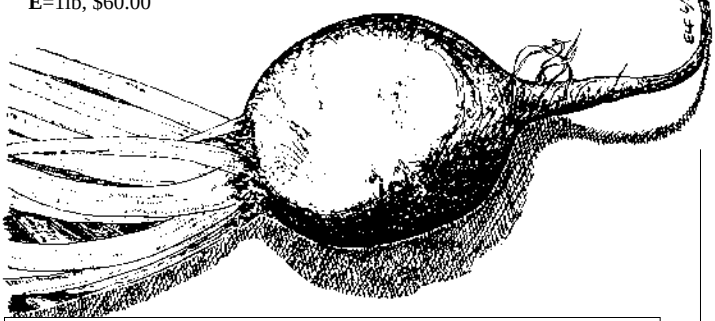
2170LZ Lutz Green Leaf (60 days) "Thanks for developing a source for Lutz Green Leaf Beet—I've been bereft for several years," said Joan Erlanger of Lincoln City, OR. We are pleased to have a full crop again after many years. This variety became crossed up and true seed has been hard to find. True Lutz sports glossy green tops without any purple. The roots will never win any beauty contests, but if you bake the big ones for about an hour, you will enjoy a very special sweet treat. You'll have Lutz of luck getting them to grow that way if you provide them with plenty of mellow compost, sow your seeds further apart than for other beet varieties and thin the roots to 4" apart. Heirloom variety from Europe, also known as Winter Keeper, is the best beet to grow for winter storage. ①
A=1/8oz, $1.80 **B**=1/2oz, $6.50 **C**=1oz, $12.00 **D**=4oz, $36.00 **E**=1lb, $120.00

2182DD Detroit Dark Red Short Top (60 days) "New varieties come and go, but the Detroit Dark Red, year after year maintains its popularity and holds its place right at the top of the list of good midseason varieties," asserted Stark Bros. catalog in 1921. Introduced 1892 and still the standard late variety for home gardeners and canners. Globular smooth uniform beets with tender oxblood-red flesh. This Short Top strain had the best roots in our evaluation. ②③
A=1/8oz, 80¢ **B**=1/2oz, $1.20 **C**=1oz, $2.20 **D**=4oz, $4.00 **E**=1lb, $13.00 **K**=5lb, $60.00

Bull's Blood (60 days) Prized for its spectacular leaves, not its rough flattened globe-shaped roots. Runaway winner of the 26 varieties in our beet greens trial, sweet with never a hint of oxalic aftertaste. Also clear winner in appearance, with large glossy reddish-purple leaves. No bull, it holds quality all summer, with color intensifying as it grows, especially under cool conditions in fall or under winter cover. Bull's Blood is Eliot Coleman's red leaf of choice for winter harvest salad mixes (see p. 230 of *The Winter Harvest Handbook* #**9876**). Old variety; its name hints of 19th-century origins when beets were known as blood turnips. Selected around 1840 from the French variety Crapaudine for darkest-colored leaves.

2186BB Bull's Blood All our seed is held over. ②
A=1/8oz, $1.00 **B**=1/2oz, $2.20 **C**=1oz, $4.00 **D**=4oz, $9.00 **E**=1lb, $30.00

2187BO Bull's Blood OG An improved strain with nice dark foliage, tender and sweet. WSDA-certified. CCOF-certified. ②③
A=1/8oz, $1.50 **B**=1/2oz, $3.50 **C**=1oz, $6.00 **D**=4oz, $18.00 **E**=1lb, $60.00



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RADISHES *Raphanus sativus*

1/8 oz packet sows 12½ ft, 1 oz 100 ft. Radishes average 2,500 seeds/oz. Represented in ancient Egyptian hieroglyphics, they were part of the diet of the pyramid builders 2,700 years ago. According to William Woys Weaver in *100 Vegetables and Where They Come From,* radishes were viewed in the 18th century as great relievers of the common cold, powerful fortifiers of digestion, and useful in breaking down kidney stones.

Minimum germination temperature 40˚, optimal range 55–85˚, optimal temperature 85˚, emergence takes 11 days at 50˚, only 4 days at 68˚, 76% normal seedlings at 50˚, 97% normal at 59˚.

See also #**6009** Plum Purple in discounted specials.

Summer RADISHES

All open-pollinated except #2212 Gloriette and #**2243** Cheriette**.** Summer radishes may be sown almost as soon as the ground can be worked in the spring. They emerge rapidly and grow quickly for a good fresh spring food. Thin to at least 2" for attractive uniform roots. They develop more pungency in hot temperatures and dry conditions than in cool moist weather. Most are ready for harvest at about the size of a half dollar and will rapidly get woody if allowed to grow much larger. Joanna Linden and Roberta Bailey were surprised to learn that each had been parboiling the greens and roots separately, then eating them together as very early spring salad. And the pot liquor, mmmm…

Thanks to Bryan O'Hara of Lebanon, CT, for suggesting that hybrid red round radishes are "significantly more consistent and higher yielding than the open-pollinated ones." This proved completely true in my 2013 radish trial from which we are offering the two best hybrids.

2212GL Gloriette (24 days) F-1 hybrid. Second out of the gate in my 2013 trial, more uniform than the quicker Rover. Bright red and globe-shaped, all ten specimens in my sample were acceptable and eight of them marketable. The snow-white flesh was crisp, mild and juicy on June 12 after a period of cool rains. By the solstice, with the onset of warmer weather, it had developed more heat. Strong medium-sized tops good for bunching. Good shelf life after harvest. Tolerates FY. ⑤ **NEW!**
A=1/8oz, $1.40 **B**=1/2oz, $4.00 **C**=1oz, $7.00 **D**=4oz, $22.00 **E**=1lb, $75.00

2214CB Cherry Belle (25 days) A good smooth red-skinned bunching radish making balls 3/4" across with firm white flesh. Some variation in our observation plots. 1949 AAS. ③⑤
A=1/8oz, 80¢ **B**=1/2oz, $1.20 **C**=1oz, $2.00 **D**=4oz, $4.00 **E**=1lb, $9.50 **K**=5lb, $46.00

2224EE Easter Egg (25 days) These good-sized delicious radishes do not become woody, hollow or too hot. Nor do they bolt easily. Kids and adults love this fascinating blend which comes in shades of pink, purple, red, violet and white. Always our most popular radish. ⑤
A=1/8oz, $1.10 **B**=1/2oz, $2.10 **C**=1oz, $4.00 **D**=4oz, $8.00 **E**=1lb, $27.00

2234CH Champion (25 days) Smooth scarlet roots with firm mild flesh grow quickly to edible size. 1957 AAS. Some variation in our observation plots.②
A=1/8oz, 80¢ **B**=1/2oz, $1.20 **C**=1oz, $2.00 **D**=4oz, $4.50 **E**=1lb, $10.50 **K**=5lb, $50.00

2243CT Cheriette (26 days) F-1 hybrid. Vibrant scarlet skins with crisp sweet white flesh. Sizing up more slowly than #**2212** Gloriette, they showed the best field-holding quality in the trial and had the sweetest flavor with a mild tang. I found all ten specimens in the sample acceptable, and nine of them sufficiently uniform to be marketable. Round balls with the faintest tendency toward oval. A higher yielder and stands heat better than any of our open-pollinated selections. Short tops. ⑤ **NEW!**
A=1/8oz, $1.40 **B**=1/2oz, $4.00 **C**=1oz, $7.00 **D**=4oz, $22.00 **E**=1lb, $75.00

2248FB French Breakfast (26 days) Holli Cederholm says "customers know this one by name." These are not just for spring and fall enjoyment, "I can sell bunches of French Breakfast radishes all summer long." Also favored in Paris markets since before 1879, and our second-most popular radish. "A medium-sized radish, olive-shaped, small top, of quick growth, very crisp and tender, of a beautiful scarlet color, except near the tip, which is pure white. A splendid variety for the table, on account of its excellent quality and its beautiful color." —From D.M. Ferry & Co's Descriptive Catalog, 1902. Gets pithy earlier than many others. ⑤
A=1/8oz, 90¢ **B**=1/2oz, $1.60 **C**=1oz, $2.80 **D**=4oz, $8.00 **E**=1lb, $20.00 **K**=5lb, $96.00

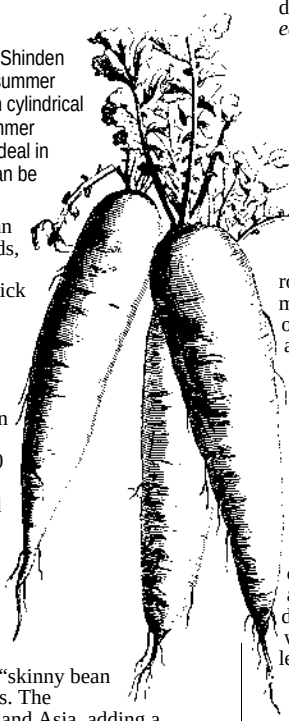
Plum Purple OG *Not available in 2014.* If your Plum Purple OG was off-type last season (skinny purple roots or long and white like a daikon) please enclose a note for a refund.

2257ZT Zlata (30 days) A new color in summer radishes; these shimmery yellowish-tan russeted medium-sized beauties from Poland starred in our MA trial. Crunchy and crispy white interiors, spicy but not overwhelming, good fresh and even better braised. Its light-textured leaves make good young greens. Did not bolt or split and held quality even in all the June 2009 rains. Perfect for bunching. ③
A=1g, $1.20 **B**=4g, $3.60 **C**=14g, $7.50 **D**=28g, $13.00
E=112g, $45.00

2262WI White Icicle (30 days) Also known as Lady Finger, an heirloom listed by Fearing Burr as White Naples, White Italian and White Transparent. Firm tender all-white roots for the home garden will grow down 4–6" in all but the heaviest soils. Mild if harvested when young and slender, and remains in good eating condition longer than most other summer radishes. Starks in 1924 asserted that Icicle was the most widely planted of all radishes and "absolutely unsurpassed in quality." All of our seed was held over, germinates at 86%. ⑤
A=1/8oz, 90¢ **B**=1/2oz, $1.60 **C**=1oz, $2.80 **D**=4oz, $8.00
E=1lb, $20.00 **K**=5lb, $96.00

Winter RADISHES

All open-pollinated except #2263 Saisai Leaf and #**2282** Shinden Risoh. Winter radishes are slower-growing than the quick summer kind. Many grow deeper roots than summer radishes, often cylindrical in shape. Thin to 6" apart. They hold much longer than summer radishes but if they should start to bolt, pinch off the tops. Ideal in September and October from an early July planting, and can be stored for winter.



2263SS Saisai Leaf (35 days) F-1 hybrid. An Asian radish developed primarily to provide leaves for salads, stir-fries and pickling. Harvest the juicy pale green succulent leaves when they are young and tender. Quick growing and slow to bolt. Can be allowed to grow full-sized daikon roots for a dual use. The roots are plumper, slightly shorter and milder than #**2282** Shinden Risoh with a texture that pleased Clayton Carter of Fail Better Farm. They will keep all winter in the root cellar. Plants can be densely sown if grown only for their leaves. ⑤
A=1/8oz, $1.30 **B**=1/2oz, $4.00 **C**=1oz, $7.00
D=4oz, $20.00 **E**=1lb, $60.00

2264RT Rat-tail (50 days) Grown for its tangy seed pods, not its roots. William Woys Weaver called it "the Don Juan of radishes" because it so readily crosses with all others. Introduced from Japan in 1866-67 by James J.H. Gregory. Attracts butterflies and other pollinators, so grow it even if you don't want to consume its pungent pods. These often grow as long as rat's tails and almost as fibrous, so garden writer Barbara Damrosch advises harvesting them at "skinny bean size like a French filet bean" for maximum tenderness. The immature purplish-green pods are a delicacy in India and Asia, adding a mustardy zing to salads, stir-fries and other dishes. If you've never let a mustard or radish plant finish, you might be surprised to learn they will grow to 5' and branch out as they set seed, so give them plenty of room. Damrosch suggests staking or trellising them for ease of picking; tomato cages work well. Your objective is not a small root, but a copious supply of pods. ①⑤
A=1/8oz, $2.00 **B**=1/2oz, $7.00 **C**=1oz, $13.00 **D**=4oz, $30.00

2266MB Munchener Bier (55 days) Here is the perfect accompaniment to a good dark beer. Germans traditionally serve these mildly pungent large white tapered roots sliced thin and salted to go down with their brew, but the radishes are equally good sautéed and then salted. Gives a double harvest because the tender 2–3" aerial seedpods are good in salads and stir-fries. ②
A=1/8oz, $1.40 **B**=1/2oz, $5.00 **C**=1oz, $9.00 **D**=4oz, $25.00
E=1lb, $80.00

2267GM Green Meat (55 days) Unique miniature daikon radish with striking lime-green flesh grows 6–9" long and 1–3" wide. The above-ground exposed shoulders turn a deep green while the tips remain white. Fine-grained, crisp and sweet. Carter says it has a "distinct green-apple flavor." Asians use it for salads, cooking and pickling. David Nonnenmacher suggests trying a slice on home-made bread slathered with butter. He says Green Meat and #**2268** Misato Rose keep in the root cellar until May. ⑤
A=1/8oz, $1.70 **B**=1/2oz, $5.00 **C**=1oz, $9.00 **D**=4oz, $30.00
E=1lb, $110.00

2268MO Misato Rose OG (60 days) Also known as Chinese Red Heart radish, described in its native land as *xin li mei*, meaning 'in one's heart beautiful.' These are of two types. About half have light greenish-tan outer skins and light green stems and leaf veins. The remainder have medium-rose outer skins, rose stems and leaf veins. The roots on each type have the characteristic rose flesh, the ones with the darker skins having darker and more pungent hearts. Both are fine tasting and good looking, with plenty of spiciness, a rich sweet vegetable undertone and no harsh sharpness. Will grow as large as a big beet if given sufficient space. For autumn crops, a good keeper. MT-certified. ①
A=1/8oz, $1.50 **B**=1/2oz, $5.00 **C**=1oz, $8.00 **D**=4oz, $24.00
E=1lb, $80.00

2270BS Round Black Spanish (65 days) My recommended variety for Leslie Gensburg of E. Burke, VT, who asked, "Whatever happened to HOT radishes?" Try a slice of the venerable Black Spanish. Traced back to the 16th-century conquistadors. Turnip-shaped 4" roots with corklike black exteriors have extremely pungent white flesh which loses some heat when boiled or stir-fried. Can be stored like carrots and beets in slightly moistened sand in the root cellar. ③
A=1/8oz, 80¢ **B**=1/2oz, $1.20 **C**=1oz, $2.00 **D**=4oz, $4.00
E=1lb, $10.50 **K**=5lb, $48.00

2282SR Shinden Risoh (68 days) F-1 hybrid. Daikon grows long straight roots, crisp with a full hot flavor. Cooking softens the texture, and mellows the heat. This type showed the best uniformity and the least tendency to bolt in our observation plots. *Daikon* means 'big root' in Japanese. Long cylindrical 2 1/2 lb roots are capable of penetrating 20" in friable soils. "Daikon went crazy when given space in our sandy soil. We bartered three dozen the size of stadium clappers to a local Korean restaurant for sumptuous meals last fall," recounted Dan Kahn. Heldover seed tests at 88%. Supplier has discontinued. *This is the last year we will offer. Seed in short supply; order early.* Resistant to yellow wilt and virus. ⑤
A=1g, $1.30 **B**=4g, $3.60

OTHER ROOTS

BURDOCK *Arctium lappa*

2300TG Takinogawa (120 days) Open-pollinated. Culture like carrots, working the soil deeply, direct-sowing in spring and thinning to 3–6". Harvest in fall or early next spring. Treasured by the Japanese, who call its long fleshy aromatic taproot *gobo*. Takinogawa is the standard Japanese variety, setting 1–2' mild earthy-tasting bittersweet roots. Small roots are peeled and used in salads, larger roots are good in stir-fries and soups. Burdock has a long history of use as a medicinal as well. Herbalist Deb Soule says that burdock root, whether eaten or used in a tea or tincture, nourishes the liver and kidneys, balances the appetite and digestion, and is useful in anti-cancer remedies. Burdock roots and seeds are also used in combating skin diseases. Think about that the next time you run into burdock as a common farmyard weed dispensing its ubiquitous nuisance burrs. ①
A=1/8oz, $1.50 **B**=1/2oz, $5.00 **C**=1oz, $8.00 **D**=4oz, $26.00

ROOT PARSLEY *Petroselinum crispum*

2301AR Arat (88 days) Open-pollinated. "Was thrilled to see a new root parsley in the catalog. We were among the ones requesting Hamburg some 30 years ago," recalled Dan Kahn. Enhance your soups and specialty dishes with these nutty-flavored roots redolent of a parsley-celery combination. Arat is sweeter and more uniform than Hamburg. These roots are whoppers: they fill out well and grow almost a foot, benefiting from a deeply worked seed bed. You can sustain a harvest through much of the winter and possibly into spring if you protect them. Young flat parsley leaves also add zest. ④
A=1/160z, $1.90 **B**=1/8oz, $3.50 **C**=1/2oz, $12.00 **D**=1oz, $20.00
E=4oz, $76.00

PARSNIPS *Pastinaca sativa*

1/8 oz packet sows 25 ft, 1 oz about 200 ft. All open-pollinated. Seed is short-lived; if you are planning to use old seed, germ test in paper towels before sowing. Slow to germinate (14–21 days). Prepare a deep seedbed and keep it moist with frequent watering until emergence.

One of the best for grating and stuffing into eggrolls, strudels and veggie pies. A parsnip pie is an amazing treat. Harvest some parsnips after frost for late fall delights. The remainder will taste even sweeter in the spring after overwintering in the ground! Minimum germination temperature 35˚, optimal range 55-70˚, optimal at 65˚, emergence takes 27 days at 50˚, 14 days at 68˚, 89% normal seedlings at 68˚, only 77% normal at 77˚.

2306DO Andover OG (120 days) Always a best-seller when we have the seed for this outstanding variety—an absolute knockout in our trials. Those with good tilth can anticipate consistent production of refined tapered cylindrical roots 12–14" long. Developed by the U. of Minnesota. OT-certified. ①
A=1/8oz, $1.90 **B**=1/2oz, $5.00
C=1oz, $9.00 **D**=4oz, $30.00
E=1lb, $110.00

2310HA Harris Model (120 days) Sweet-flavored smooth tapered roots average 10". For better performance, prepare raised beds, especially in heavy soils. Don't believe stories that this strain is running down. It looked great in our plots. ②
A=1/8oz, 80¢ **B**=1/2oz, $1.40
C=1oz, $2.20 **D**=4oz, $5.00
E=1lb, $14.50 **K**=5lb, $68.00

SALSIFY *Tragopogon porrifolius*

Gammel Gotlandsk OG (120 days) Biennial. When will we satisfy those who want salsify? Alas, not this year as it is proving a hard seed crop to grow. *Not available in 2014.*

SCORZONERA *S. hispanica*

2322NR Noir de Russie (120 days) Open-pollinated biennial. *Scorzonera* derives from the Spanish *corteza negra* or 'black bark.' Until the 16th century it was thought to be efficacious against the bubonic plague and snake bites. Long narrow dark-skinned white-fleshed root is a good source of iron, phosphorus and calcium. Although not handsome, it is prized by gourmet cooks in Europe for its distinctive flavor, and used like potatoes in *haute cuisine.* Much of the flavor resides in the dark skin so do not peel before cooking. Has a firm smooth texture, not sweet like many root vegetables. Culture like parsnips, overwintering in the field and pulling as needed. Flavor improves after a hard frost. Has only limited storage in root cellars, nor does it can or freeze well so use right after harvest. Seed is short-lived; germ test old seed in paper towels before sowing. ②

A=1/8oz, $1.40 **B**=1/2oz, $3.50 **C**=1oz, $6.00
D=4oz, $20.00 **E**=1lb, $75.00

SKIRRET *Sium sisarum*

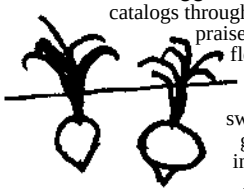
Skirret OG (120 days) Open-pollinated perennial. Still no crop. *Not available in 2014.*

TURNIPS & RUTABAGAS

1/8 oz packet sows almost 40 ft, 1 oz about 300 ft. All open-pollinated except #2377 Oasis. ~9,000 seeds/oz. Hardy members of Crucifer family. Thinning is critical for full-sized roots. Turnips have a shorter growing season and are not as cold-hardy or as good keepers as rutabagas. Turnips are best picked before they get large and fibrous. Rutabagas, also known as Swedish turnips or Swedes, form enlarged roots above ground with a finely branched system below.

Minimum germination temperature for turnips 40˚, optimal range 60-95˚, optimal temperature 75˚, 79% normal seedlings at 50˚, 98% normal at 59˚.

2372WE White Egg Turnip (45 days) *Brassica rapa* A staple of seed catalogs throughout most of the 19th century. Henderson in 1902 praised its perfectly smooth skin and snowy white flesh. Roots are egg-shaped, grow rapidly half out of the ground, ideal for early market bunching before they attain full size. The flesh is very sweet, so mild they can be eaten raw fresh from the garden, also good for pickling. Keeps well; flavor intensifies in storage. ②③



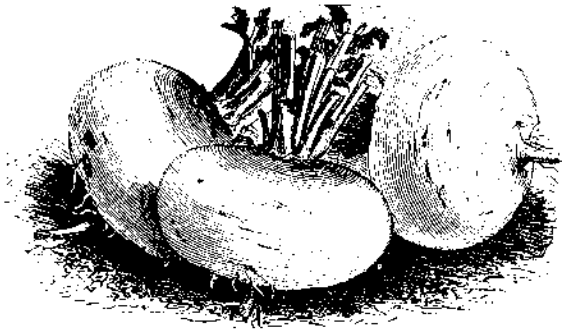
A=1/8oz, 80¢ **B**=1/2oz, $1.40 **C**=1oz, $2.20
D=4oz, $5.00 **E**=1lb, $9.50 **K**=5lb, $44.00

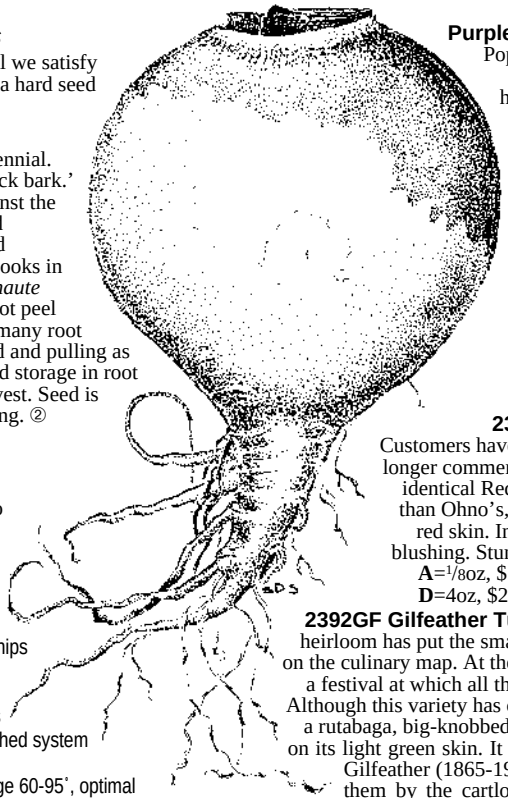
2376GB Gold Ball Turnip (45 days) *B. r.* Listed in the *Album Vilmorin* (1854-55) as Robertson's Golden Ball, also known as Orange Jelly. Not truly orange, the skin is very smooth and yellow and the soft flesh is golden-yellow. Rather broad leaves of medium height. Although the globes reach 4–5" at full size, they achieve peak flavor and maximum sweetness at 3" in diameter. Good keeper. Maryland market grower Brett Grohsgal writes, "Gold Ball Turnip is a treasured cultivar for winter production on our farm.…after the frosts and freezes have begun, it comes into its own: produces large amounts of superbly flavored turnips 1–2" across…Remains mild and nutty [with] a firm, near-perfect texture. Best simmered or roasted. Pleases even those retail customers who don't really like other turnips, and a strong seller with our restaurant chefs." ②

A=1/8oz, 80¢ **B**=1/2oz, $1.60 **C**=1oz, $2.50 **D**=4oz, $5.00
E=1lb, $9.00 **K**=5lb, $42.00

2377TR Oasis Turnip (50 days) *B. r.* F-1 hybrid. More customers asked us for the Hakurei turnip than for any other variety. In many years of searching, Oasis is the closest we've found, sharing many fine features with Hakurei: smooth round globes, refined pure white color, delicate sweet fruity flavor and crisp tender texture so suitable for salads and light cooking. Our purchaser Nikos Kavanya esteems it highly. Good for fall as well as early summer crops. Best harvested at bunching size, but retains quality for a while. From Takii in Japan. Tolerant to DM. ⑤

A=1/16oz, $2.00 **B**=1/4oz, $6.00 **C**=1/2oz, $10.00 **D**=1oz, $18.00
E=4oz, $64.00 **K**=1lb, $240.00





Purple Top White Globe Turnip (50 days) *B. r.* Popular variety with purple tops, white bottoms and white flesh can attain 6" in diameter. An heirloom from before 1880. Starks claimed in 1921 that "other varieties are good, but this one stands in a class by itself." Sometimes used to feed livestock, but Eli and I like them in soups, and Joanna eats them up to golf-ball-sized with the greens.

2378WG Purple Top White Globe ②

A=1/8oz, 80¢ **B**=1/2oz, $1.20
C=1oz, $2.00 **D**=4oz, $4.00
E=1lb, $9.50 **K**=5lb, $44.00

2379WO Purple Top White Globe OG CCOF-certified. ③

A=1/8oz, 90¢ **B**=1/2oz, $1.60
C=1oz, $2.80 **D**=4oz, $5.50
E=1lb, $16.00 **K**=5lb, $75.00

2384RR Red Round Turnip (55 days) *B. r.* Customers have asked for Ohno Scarlet Turnip, which is no longer commercially available. Instead, we offer the almost identical Red Round. Red Round's root is a little rounder than Ohno's, but with the same tennis ball size and bright red skin. Inside flesh is white with a bit of variable rose blushing. Stunning sliced on a crudité platter ⑤

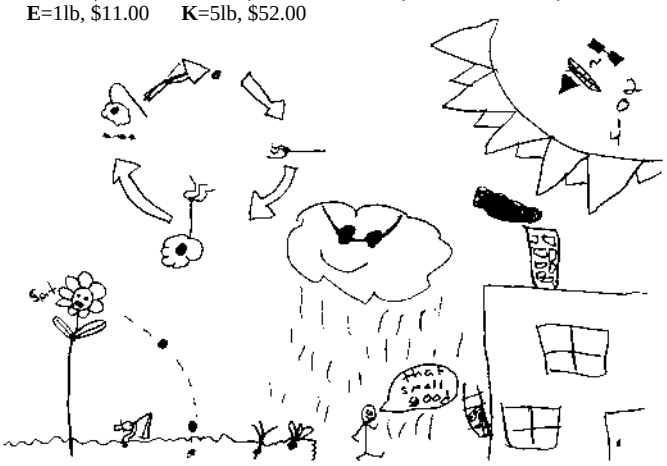
A=1/8oz, $1.40 **B**=1/2oz, $4.00 **C**=1oz, $7.00
D=4oz, $20.00 **E**=1lb, $68.00

2392GF Gilfeather Turnip (85 days) *B. napus* This white-fleshed heirloom has put the small town (population 900) of Wardsboro, VT, on the culinary map. At the end of October each year, Wardsboro hosts a festival at which all the dishes served feature its famous vegetable. Although this variety has come down in folklore as a turnip, it is really a rutabaga, big-knobbed and bulky with small hairy tendrils growing on its light green skin. It was either developed or discovered by John Gilfeather (1865-1944) of Wardsboro in the late 1800s. He sold them by the cartload in Brattleboro, VT, and Northhampton, MA, in the early 1900s. Gilfeather, a lanky secretive bachelor, is said to have cut the tops and bottoms off his turnips, so that no one else could propagate them. Nevertheless, some seeds escaped to a neighbor who gave them to market growers William and Mary Lou Schmidt, who salvaged, multiplied and commercialized them. Sweeter and later to mature than other turnips, not woody even at softball size, and taste better after frost. Gilfeather for greens? Ayuh. "Another veggie to add to your season-extending greens list," testifies Amy Burke of York, ME. "We have been harvesting the greens all fall and into the winter. It is now the end of January and we have been digging the leaves out from under the snow. They have no frost/freeze damage whatsoever, and are even hardier than Red Russian and Beedy's Camden kales. Plus they get sweeter after frost." Listed on Slow Food's Ark of Taste. ❄ ①

A=1/16oz, $1.50 **B**=1/4oz, $4.00 **C**=1oz, $12.00 **D**=4oz, $45.00
E=1lb, $150.00

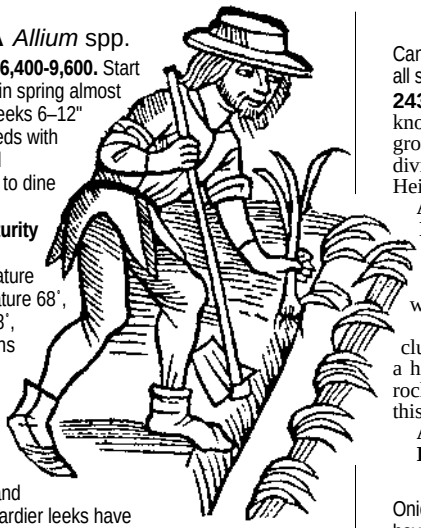
2398LU Laurentian Rutabaga (95 days) *B. n.* This popular Canadian variety sports a deep purple crown and cream-yellow base. Uniform 5–6" almost neckless roots suitable for winter storage, larger and sweeter than American Purple Top. Pale yellow flesh has refined texture and taste. "The mix of a sweet cabbage flavor with a potato-ish texture," summarizes Anne Elder. ②

A=1/8oz, 80¢ **B**=1/4oz, $1.20 **C**=1oz, $2.00 **D**=4oz, $4.00
E=1lb, $11.00 **K**=5lb, $52.00



"A blessing we often say at our lunch table at the farm…
This food is a gift of the Earth and the rain,
the light of the sun and the air,
as it gives us our life,
may we grow to sustain
this world with our love and care."
–Anne Elder, Community Farm of Ann Arbor, MI

ALIMENTARY ALLIA *Allium* spp.



1/16 oz packet about 400-600 seeds; 1 oz, 6,400-9,600. Start indoors in Feb. or March and transplant out in spring almost as soon as the ground can be worked. Set leeks 6–12" apart, onions 4–6" in trenches in well-dug beds with generous quantities of organic matter. Avoid transplanting next to grass strips; slugs love to dine on tiny allium seedlings. Irrigate seedlings whenever the topsoil dries out. **Days to maturity are from date of transplanting.**

For onions minimum germination temperature 50˚, optimum range 60-70˚, optimal temperature 68˚, emergence 13 days at 50˚, only 5 days at 68˚, 99% normal seedlings at 68˚. Because onions germinate poorly in temperatures above 70˚ we discourage the use of bottom heat.

LEEKS *A. porrum*

All open-pollinated. Leeks have become a mainstay in our kitchens throughout the fall. Early leeks have tall shanks above ground and should be harvested before severe frosts. Hardier leeks have broader, shorter shanks and will hold till November. Leeks brought into the root cellar will survive almost all winter if heeled into dirt.

2407RO King Richard OG (75 days) This distinctive refined early leek still rules supreme. Its elegant 1' upright shanks can be magnificent. We gave a Judge's Award to one such specimen at the 2011 Common Ground Fair. Ready in late August and can withstand light frosts. Should be harvested before those frosty moonlit nights in late October. *Short crop; order early!* OT, CCOF-certified. ①

A=1/16oz, $1.70 **B**=1/8oz, $3.20

2408LN Lincoln (75 days) A leek with a dual purpose, Lincoln may be sown thickly like scallions, harvested in 50–60 days and bunched as finger-thicks for upscale direct markets and discerning chefs. Or, transplanted more conventionally, they may be allowed to grow another three weeks to full size. Shanks even longer and sleeker than King Richard's with delicate sweet leek flavor. Ready in late August, will withstand light frosts, but should be harvested before late October. ④

A=1/16oz, $2.70 **B**=1/8oz, $5.20
C=1/2oz, $17.00 **D**=1oz, $32.00
E=4oz, $120.00 **K**=1lb, $440.00

2411SO King Sieg OG (84 days) Beth Rasgorshek of Canyon Bounty in Idaho crossed King Richard with Siegfried Frost leek to create a versatile stable cultivar that has some of the good attributes of both. Sieg appears to have inherited the most from Siegfried. Its shanks are intermediate between the long King Richard and the short Siegfried, about 6" long but with a wonderful 3" thickness for a wide edible area. It also has some of Siegfried's delightful blue-green coloration and delayed maturity. Its growth pattern suggests it is a good candidate for overwintering. ☙2005. ID, QCS-certified. ①

A=1/16oz, $1.70 **B**=1/8oz, $3.20
C=1/2oz, $7.50 **D**=1oz, $12.00
E=4oz, $36.00

2425BS Bleu de Solaize (110 days) This hard-to-find French heirloom was a noble replacement for Siegfried. So-named because its dark green leaves sometimes develop a tinge of blue during cold spells. Hardy fat medium-long shanks with mild flavor good in soups. Dates back to the 19th century. The only leek to overwinter for Adam Tomash and June Zellers. Of their 20 plants, 10–15 survived the alternating freezes and thaws of the 2005-6 Maine winter and were edible in spring, with only straw mulch for protection. We have plenty of heldover seed at 82%. ②

A=1/16oz, $1.50 **B**=1/8oz, $2.80 **C**=1/2oz, $5.50 **D**=1oz, $9.00
E=4oz, $28.00 **K**=1lb, $95.00

Siegfried (120 days) Crop failure; *not available in 2014.*

"We can't begin to tell you how much we have appreciated you all these years: the humor in your catalog, integrity, dedication to earth-friendly practices, great prices, activism, kindness…"
–Amalya Pomerantz, Durango, CO

Days getting lighter? Avoid disappointment! Consult our website **fedcoseeds.com** to find if your favorites are still in stock or, if not, worthy substitutes for them.

SCALLIONS *A. fistulosum*

Can be direct-seeded, spring or fall. For a steady market crop, seed every two weeks all season.

2439EV Evergreen Hardy White (65 days) Open-pollinated. Also known as Nebuka, a perennial bunching onion. If overwintered in the ground, develops clumps of scallions in the spring that can be harvested or divided and replanted. A welcome treat in April, one of the first fresh foods. Heirloom from Japan originated in the 1880s. ③

A=1/16oz, $1.30 **B**=1/8oz, $2.40 **C**=1/2oz, $5.00 **D**=1oz, $9.00
E=4oz, $15.00 **K**=1lb, $58.00

SHALLOTS *A. cepa* (aggretatum group)

2441PR Prisma (100 days) F-1 hybrid. A delicious long-day shallot with a strong onion flavor. Sow inside at the same time as onions and leeks or direct seed outdoors in early spring 1/2" apart in a 2–4" wide band. For clusters sow more thinly. Each seed will produce 2–5 bulbs, red-purple with a high-gloss finish and angular edges. Always ready by September 1, still rock-hard the following April, and can last even longer. Supplier is dropping this variety; *this is the last year we will offer it.* ④

A=0.5g, $2.30 **B**=1g, $4.20 **C**=2g, $8.00 **D**=4g, $15.00
E=14g, $44.00 **K**=28g, $85.00

ONIONS *A. cepa*

Onions are day-length sensitive. The earlier they are set out, the more chance they have to make top growth while the days are lengthening. The more top growth, the greater the bulb size. After summer solstice they begin bulbing. After half the onion tops fall, push over the remainder and harvest within a week. Field-cure in the sun about 10 days until dry, covering with a tarp in wet weather. Curing is essential for long storage. Hang sacks in a cool dry well-ventilated place, periodically removing sprouting or rotting bulbs. Onions survive light frosts.

We do not hold over hybrid onion seed because of precipitous decreases in germination. Onion and leek seed is short-lived. Retest 1-year-old seed before using. Discard anything older.

Onions are second only to tomatoes as the world's most economically important vegetable. In the United States they have a $4 billion annual retail value. The average American eats 18.7 lb per year.

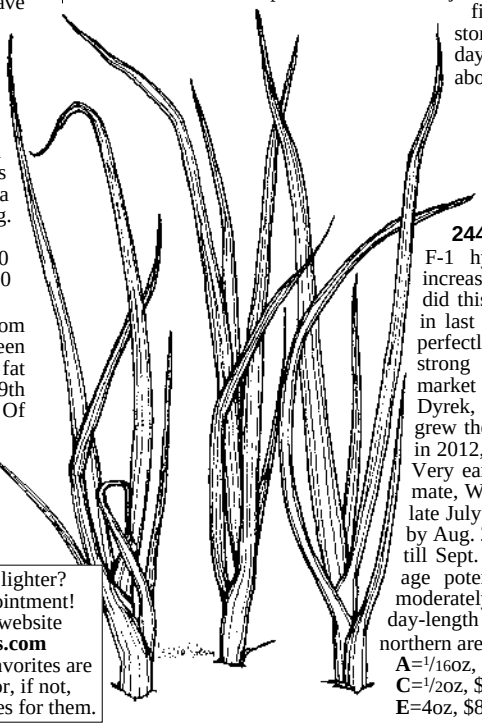
When it begins to warm up in spring, put your remaining storage onions in your refrigerator crisper. Most will keep without sprouting until your new crop is ready.

2444CW Crystal White Wax (70 days) Open-pollinated. Unlike most onions, these can be direct-seeded in spring with the peas. Then the 1 1/2" pearly white bulbs ripen with the peas for early summer baby onions or pickles. ②

A=1/16oz, $1.30 **B**=1/8oz, $2.40 **C**=1/2oz, $5.00 **D**=1oz, $9.00
E=4oz, $16.00 **K**=1lb, $60.00

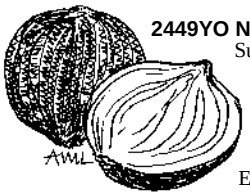
2446RM Red Marble (95 days) F-1 hybrid. When the Cipollinis are down, this hard red variety is the best of its kind. Alan LePage loves how hard they are and how fast they finish. While they can be closely spaced to grow 1–2" baby red pearl onions, they can also be spread apart to make full-sized onions 2–3" across with the characteristic Cipollini flat bottoms and thin necks. A few will grow as big as 4" in fertile conditions. Dark red penetrates deep into the rings. LePage observes that unlike yellow Cipollinis, they always sell well when he displays them at farmers market. "Their stony polished red skin just shines when they are fully finished." Excellent keepers, they store till February or March. Long-day type for northern latitudes above 40˚. ④

A=1/16oz, $1.60
B=1/8oz, $3.00
C=1/2oz, $8.50
D=1oz, $16.00
E=4oz, $56.00



2447WW Whitewing (97 days) F-1 hybrid. Had the biggest sales increase of any variety after I finally did this handsome white onion justice in last year's catalog. Its firm, almost perfectly round 1 lb bulbs with slender strong necks would make anyone's market sales take wing. Trialer Donna Dyrek, who is lavish in their praise, grew them even bigger, up to 1 1/2–2 lb in 2012, an outstanding year for onions. Very early and well adapted to our climate, Wing can be harvested as soon as late July and its tops went down in 2012 by Aug. 20. In a cooler season they stand till Sept. 1. Hard (bespeaking long storage potential), pleasantly pungent and moderately sweet. Intermediate to long day-length suitable for mid-Atlantic and northern areas. ④

A=1/16oz, $1.80 **B**=1/8oz, $3.40
C=1/2oz, $12.50 **D**=1oz, $23.00
E=4oz, $85.00



2449YO New York Early OG (98 days) Open-pollinated. Superior strain of Early Yellow Globe selected for storage until early spring. New York Early was maintained by Orange County, NY, commercial onion growers. Very firm mild yellow onions may be eaten raw in salads or sandwiches. They average 2½–3" across and store longer than Early Yellow Globe. Adapted from 38˚ latitude to southern Quebec/Ontario. OT-certified. ①

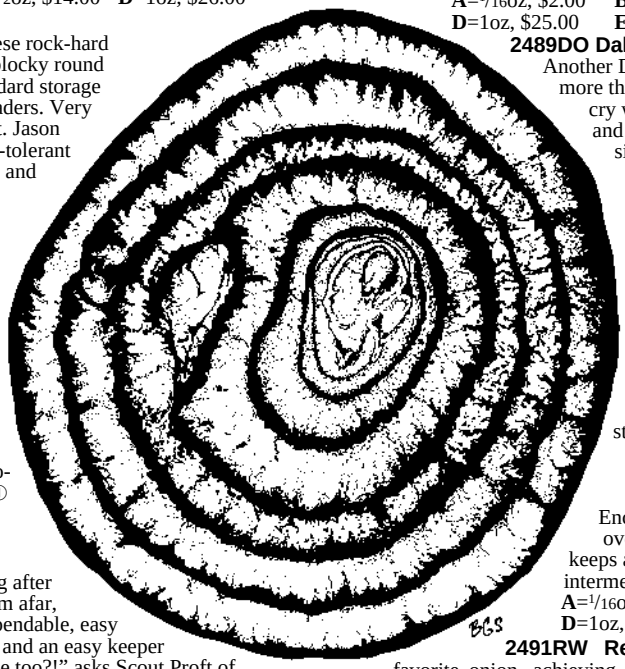
A=1/16oz, $1.70 **B**=1/8oz, $3.20 **C**=1/2oz, $7.50 **D**=1oz, $12.50
E=4oz, $36.00 **K**=1lb, $140.00

2454EX Expression (98 days) F-1 hybrid. In the software world a "regular expression" is computer code used to search for patterns in text. In the horticultural world, though, there's nothing regular about this Expression. No searching is necessary to recognize its pattern of earliness, intermediate to long day-length (suitable for middle Atlantic and northern areas), heft (the large light brown globes average about 12 oz) and flavor (sweet). "Sweet and juicy," says trialer Donna Dyrek. Bred by Bejo for high yields in rich clay loamy soils in the Northeast and Pennsylvania. Short to medium storage. Has yet to express much in the way of sales, so this will be *its last year offered* unless they pick up. PR tolerance. ④

A=1/16oz, $1.90 **B**=1/8oz, $3.60 **C**=1/2oz, $14.00 **D**=1oz, $26.00
E=4oz, $100.00

2472CP Copra (104 days) F-1 hybrid. These rock-hard yellow-skinned medium-sized onions with blocky round shapes and thin necks have become the standard storage onion for commercial growers and homesteaders. Very sweet in storage and one of the last to sprout. Jason Kafka has found that Copra is more drought-tolerant than other varieties. Adaptation: 38˚ latitude and north. ④

A=1/16oz, $1.90 **B**=1/8oz, $3.60
C=1/2oz, $12.50 **D**=1oz, $23.00
E=4oz, $85.00 **K**=1lb, $320.00



2474DO Clear Dawn OG/BD (104 days) Open-pollinated. A new dawn for Dawn, returning to our catalog for the first time since 2011, but *in limited supply*. The best open-pollinated storage onion, Clear Dawn was bred out of Copra by biodynamic market growers. Dawn is slightly smaller than Copra with thicker necks, darker bronze skins and the same great storage capability. 8–10 oz average and very hard. Certified biodynamically grown. Stellar NOP-certified. ① **BACK!**

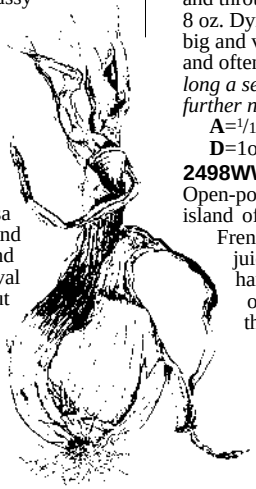
A=1/16oz, $1.80 **B**=1/8oz, $3.40

2477BC Borrettana Cipollini (105 days) Open-pollinated. "Named my farm work dog after Cipollini onions…The name can be said from afar, she's beautiful at all stages, is sweet and dependable, easy to handle (great for our senior-share cooks), and an easy keeper in the cold. Did I say they are both delectable too?!" asks Scout Proft of Someday Farm in E. Dorset, VT. This Italian heirloom is the quintessential boiling and braising onion. Shaped like a button, up to 4" wide (normally 3") but less than 1" thick. Flattened spheres with shiny golden skin slightly brighter than Copra's. Fine-grained mild flesh with a well-developed flavor. Appreciated in soups, stir-fries and shish kebab. Braids beautifully and keeps till late winter. Adapted to 38˚ latitude and north. ②

A=1/16oz, $1.50 **B**=1/8oz, $2.90 **C**=1/2oz, $7.00 **D**=1oz, $12.00
E=4oz, $40.00 **K**=1lb, $140.00

2479PR Prince (105 days) F-1 hybrid. Several commercial growers requested Prince, an outstanding storage onion from the same breeder as Copra. Prince is slightly larger than Copra and stores almost as long. A long-day type adapted to northern latitudes, Prince features classy uniform blocky large globes with vigorous tops that finish off to refined necks. Its satiny brownish-yellow skins adhere well even after long storage. ④

A=1/16oz, $2.20 **B**=1/8oz, $4.20 **C**=1/2oz, $16.00
D=1oz, $30.00 **E**=4oz, $110.00



2484AC Ailsa Craig (110 days) Open-pollinated. Also known as Exhibition. The onion made famous by Jason Kafka. Usually he produces tons of 1–3 lb onions from this variety, achieving yields well in excess of 1 lb per row foot and production multiples that Wall Street can only dream about. Ailsa is the onion to grow for the Exhibition Hall of your county fair and the ones that won Judges Awards at the last two Common Ground Fairs were the largest I have ever seen. The enormous slightly oval pale straw-colored globes are sweet, mildly pungent and store but a short while. A cross between Danvers Yellow and Cranston's Excelsior introduced by David Murray in 1887, Ailsa Craig was named after Ailsa Crag, a small steep-sided island off the west coast of Scotland. Adapted to 38˚ latitude and north. ④

A=1/16oz, $2.00 **B**=1/8oz, $3.80 **C**=1/2oz, $14.00
D=1oz, $26.00 **E**=4oz, $100.00

2485RT Rossa Lunga di Tropea (110 days) Open-pollinated. My father helped design torpedos in World War II, but none like this, the famous Italian heirloom torpedo onion. The name means Long Red of Tropea, and Tropea, in Calabria near the southern tip of Italy, is the site of a famous onion festival every August. Elongated like torpedos, these are thin-skinned glossy maroon bulbs with lighter interiors that slice easily into even rings. Sweet, mild and delicious for fall enjoyment. Plants died back in the first week of October for Donna Dyrek, will finish earlier if started indoors March 1. Excellent bunched fresh for farmers market in midsummer. Restaurant chefs love them for grilling or braising. Though we do not rate it as a winter keeper, it was still rock hard on Jan. 18 for Elaine Gambone of Plymouth, VT. Intermediate to long day for middle latitudes: 35–48˚. ②

A=1/16oz, $1.50 **B**=1/8oz, $2.50 **C**=1/2oz, $5.50 **D**=1oz, $9.00
E=4oz, $25.00 **K**=1lb, $95.00

2488VS Varsity (110 days) F-1 hybrid. Rah Rah Rah! Sis Boom Bah! Rooting (pun intended) for this Varsity is easy because it is the champion large yellow storage onion every year—big, early, uniform and hard. Sits down in mid-September. Bulbs up to 1½ lb (12–16 oz average) are nearly as big as Ailsa Craig, with a nice round shape and few doubles, and they store as well as or better than Copra. If Dyrek could have only one storage onion, she would choose Varsity as the one worth cheering for! ②

A=1/16oz, $2.00 **B**=1/8oz, $3.80 **C**=1/2oz, $13.00
D=1oz, $25.00 **E**=4oz, $95.00 **K**=1lb, $360.00

2489DO Dakota Tears OG (112 days) Open-pollinated. Another Dave Podoll breeding coup, Dakota Tears was more than 20 years in the making. Though you might cry when you cut one open—their flavor is robust and oniony—you won't weep about their impressive production of very hard yellow bulbs with medium-thick necks averaging 1 lb each with no doubles. These matured in late September from an early April start (March would be a more appropriate starting date in our latitude) and stored well for Dyrek. Holli Cederholm says hers keep till May under good storage conditions. ☙2009. ICS - certified. ①

A=1/16oz, $1.60 **B**=1/8oz, $2.80
C=1/2oz, $8.00 **D**=1oz, $15.00
E=4oz, $52.00

2490RM Rossa di Milano (114 days) Open-pollinated. This excellent red Italian storage onion is shaped like a buttercup squash without the button. It has the flat square-shouldered top tapering like a barrel to a narrower flat bottom. Tops slow to go down. Encourage the recalcitrant ones by pushing them over. Takes a while in fall to dry. Very hard and keeps a long time, till May for Cederholm. Long-to-intermediate-day type. ②

A=1/16oz, $1.50 **B**=1/8oz, $2.50 **C**=1/2oz, $5.50
D=1oz, $9.00 **E**=4oz, $25.00 **K**=1lb, $95.00

2491RW Redwing (116 days) F-1 hybrid. Kafka's favorite onion, achieving an average size of 12–16 oz and yields in excess of l lb per row foot in good seasons. They like wet springs followed by warm or hot summers and plenty of nitrogen, usually finishing nicely in the 3rd week of September. Very hard globe-shaped 3–4" bulbs with deep purple-red glossy skin keep almost as well as Copra. Rated the ultimate red storage onion. *Caution: because of its long season, may not grow well in some cool or coastal areas.* Adapted to 43˚ latitude and north. ④

A=1/16oz, $2.40 **B**=1/8oz, $4.60 **C**=1/2oz, $18.00 **D**=1oz, $34.00
E=4oz, $130.00

2493RB Red Bull (118 days) F-1 hybrid. No bull, Red Bull is one good storage onion. These ultra-hard large red globes will keep until May. Shinier and darker than Rossa di Milano and red through and through. 3–4" roots with strong tops average 8 oz. Dyrek rates her Red Bull as very red, very big and very nice. They are slow to quit growing and often won't sit until Oct. 1 so *may require too long a season for most of Central Maine and areas further north.* ④

A=1/16oz, $2.20 **B**=1/8oz, $4.20 **C**=1/2oz, $15.00
D=1oz, $29.00 **E**=4oz, $110.00

2498WW Walla Walla Sweet Spanish (125 days) Open-pollinated. Said to have originated in the French island of Corsica and been brought to Washington by a French soldier, this onion became famous in the Pacific Northwest for its juicy sweet flavor. In Walla Walla, WA, it can be wintered over. In our harsher zone, it must be sown in the spring for fall harvest. These large onions are renowned for their mild flavor as soon as they come out of the ground. They do not store. Adapted to 35˚-55˚ latitudes. ①

A=1/16oz, $1.40 **B**=1/8oz, $2.50 **C**=1/2oz, $5.50
D=1oz, $9.00 **E**=4oz, $24.00 **K**=1lb, $95.00

SPINACH *Spinacia oleracea*

¼ oz packet sows 30–50 ft; 1 oz plants 120–200 ft. Very hardy. Must be planted as soon as the ground can be worked in the spring to avoid early bolting. For fall crop try late July–Aug. sowing; to overwinter, sow late Aug.–Sept. Heavy nitrogen requirements, but avoid applying high-nitrogen fertilizers shortly before harvest to prevent high nitrate levels in the leaves. Pick large leaves often for heavier production.

Popularized by the Popeye cartoons in the '30s and '40s ("I'm strong to the finish because I eat my spinach"). Evidently, Popeye was a little ahead of his time. According to the USDA, annual consumption of spinach increased 66% between 1992 and 2002, and per capita it has multiplied more than sevenfold since 1975! Smooth-leaved spinach is easier to wash than the semi-savoyed type, and is increasingly preferred as attested by our huge sales for #**2510** Space. Heat, crowding and long day-length (over 14 hours) trigger premature bolting. To retard bolting, avoid hot-weather planting, use wider spacing and irrigate or use shade cloth.

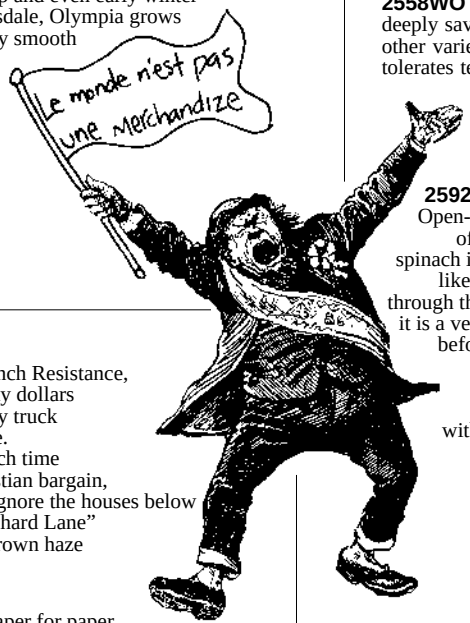
Minimum germination temperature 35˚, optimal range 45–65˚, optimal temps 55–60˚, emergence takes 23 days at 41˚, 12 days at 50˚, only 5 days at 77˚, however 91% normal seedlings at 50˚, 82% at 59˚ but only 52% at 68˚ and a mere 28% at 77˚. Spinach seed will not germinate in soil temperatures above 85˚.

Bordeaux (21 days baby, 32 days mature) F-1 hybrid. Alas, this popular variety was discontinued by its supplier. *No longer available.*

2510SP Space (37 days) F-1 hybrid. The Russians won phase one of the space race with their 1957 launch of Sputnik. Space won the spinach race with its spectacular 2005 launch in our catalog. We sold more than 4,700 packets last year, just shy of a quarter ton of seed. Space may be at the final frontier of spinach breeding. As one trialer put it, "Along with Olympia it dusted all the others." Space produces the kind of vigorous big thick wavy mostly smooth slightly savoyed leaves that market growers love and restaurant chefs adore. Sown at normal spring-planting time it will stand at least two weeks. Vigorous at all times, it was the quickest to mature from a fall planting. Upright growth results in good clean dark-green leaves with a juicy sweet taste. Resistant to DM1,2,3. ❄ ④

A=¼oz, $1.40 **B**=½oz, $2.50 **C**=1oz, $4.50 **D**=4oz, $9.00 **E**=1lb, $28.00 **K**=5lb, $125.00

2512LY Olympia (38 days) F-1 hybrid. No more bad political jokes—our Senator Olympia could no longer stand the dysfunctional Congress and finally retired. For an almost fully functional spinach, consider her namesake that always stands as strong in November as Olympia did at the ballot box. An outstanding performer for the fall crop and even early winter but not as hardy as #**2558** Winter Bloomsdale, Olympia grows fast, producing enormous yields of mostly smooth leaves up to 5x6" almost entirely lacking in oxalic acid taste, so her mild flavor goes down easily. But Olympia can't stand the heat, and bolts quickly when planted in spring. Resistant to DM1,2,3. ❄ ⑤



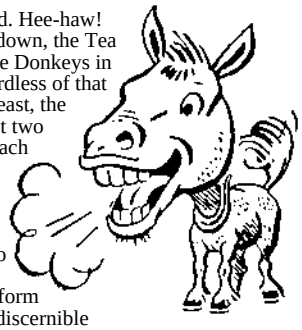
A=¼oz, $1.20 **B**=½oz, $2.20 **C**=1oz, $4.00 **D**=4oz, $8.00 **E**=1lb, $25.00 **K**=5lb, $110.00

World for Sale?

"Le monde n'est pas une merchandize,"
proclaims Jose Bove, leading a new French Resistance,
but, alas, the world *is* for sale. For twenty dollars
I pump enough of its liquid heart into my truck
to go up hills and down a few days more.
And I buy another piece of the world each time
I board a plane and strike again the Faustian bargain,
please let me land safely and I'll try to ignore the houses below
crowded together on streets named "Orchard Lane"
and especially I won't see the band of brown haze
filling the low horizon as the sun sets.

But the reverse may be true, also.
When we exchanged money for deed, paper for paper,
I never understood how much we would come to be owned by our farm,
so totally possessed by the mysteries of past, present, future,
never to be completely resolved.
Each time I leave more reluctantly.
Sell? Never! And at the place between now and never
is the world as it could be, not for sale.

2536DK Donkey (42 days) F-1 hybrid. Hee-haw! With their ill-advised government shutdown, the Tea Party may have assured a victory for the Donkeys in the 2014 congressional elections. Regardless of that outcome, when it comes to spinach at least, the Donkey has prevailed in each of the last two seasons. I never expected to find a spinach that would best #**2550** Tyee, but Donkey did just that, growing slightly faster and holding about one day longer. I loved the darker green color of its leaves and their amazing ability to bounce back after a heavy picking. More pleasing in appearance, more uniform with fewer weak plants than Tyee. No discernible difference in flavor. Like Tyee, savoyed leaves. Alas, no new crop in 2014. We have a small supply of heldover seed that tests at 84%. *Order early to avoid an Elephant-generated shutdown!* Resists DM1-11. ②



A=¼oz, $2.00

Bloomsdale (42 days) Open-pollinated. The standard crinkled-leaf spinach. Very good cold soil emergence. Much better in fall than in spring when it bolts in the heat. Recent hybrids surpass it in production and bolt resistance. David Landreth, founder of the Landreth Seed Company, developed the original Bloomsdale Spinach, forerunner of this type. ❄

2540LS Bloomsdale ②

A=¼oz, 80¢ **B**=½oz, $1.20 **C**=1oz, $2.00 **D**=4oz, $4.00 **E**=1lb, $12.00 **K**=5lb, $55.00

2541BO Bloomsdale OG CCOF-certified. ③

A=¼oz, $1.40 **B**=½oz, $2.40 **C**=1oz, $4.50 **D**=4oz, $12.00 **E**=1lb, $45.00 **K**=5lb, $210.00

2550TY Tyee (44 days) F-1 hybrid. What do you sow when mud season turns overnight to summer as it so often has in recent years? Tyee is the choice when the heat comes on fast, outperforming most other savoyed types both in yield and holding ability. This dependability has long made it our favorite crinkled-leaf spinach and accounts for its widespread appeal among both home gardeners and commercial growers. A spinach for all seasons. Upright habit. Tolerant to DM1,3. ❄ ⑤

A=¼oz, $1.40 **B**=½oz, $2.50 **C**=1oz, $4.50 **D**=4oz, $9.00 **E**=1lb, $28.00

2555GW Giant Winter (45 days) Open-pollinated. Selected for its cold hardiness. Recommended for late fall crops, winter greenhouse crops, or overwintering under mulch. Large medium-green semi-savoyed leaves. "Giant Winter is a favorite…We plant it in September, and in our unheated greenhouse it easily survives the few 0˚ nights of January and comes on strong all through the early spring," says Michael Goldman of Florence, MA. ❄ ②

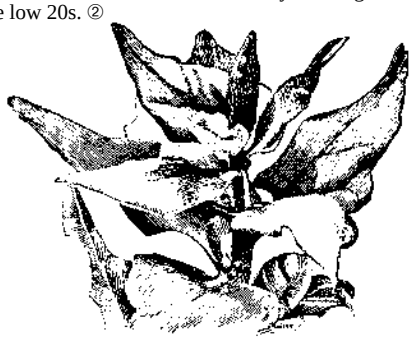
A=¼oz, $1.40 **B**=½oz, $2.50 **C**=1oz, $4.00 **D**=4oz, $10.00 **E**=1lb, $30.00

2558WO Winter Bloomsdale OG (47 days) Open-pollinated. Dark green deeply savoyed leaves are slower growing with a more spreading habit than other varieties. Recommended for early spring and fall plantings because it tolerates temperature extremes better than some hybrids. Ideal for wintering over. Heldover seed germs at 82%. Resistant to CMV and blue mold. WA-certified. ①

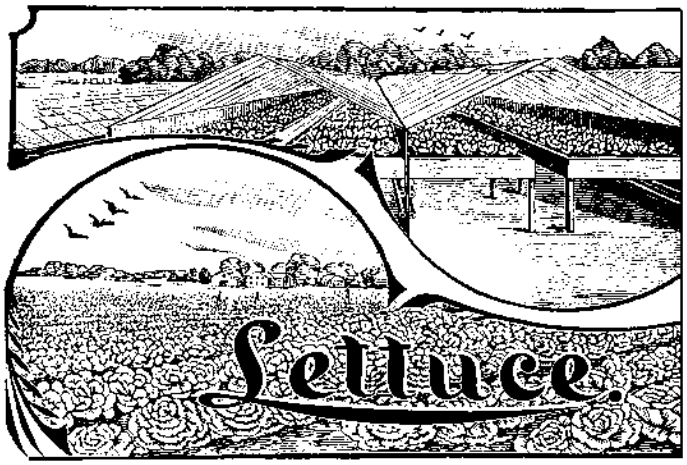
A=¼oz, $1.50 **B**=½oz, $2.80 **C**=1oz, $5.00 **D**=4oz, $12.00 **E**=1lb, $45.00 **K**=5lb, $200.00

2592NZ New Zealand Spinach (52 days) *Tetragonia tetragonioides* Open-pollinated. Captain Cook's voyagers noted it in 1770 on the shores of Queen Charlotte's Sound in New Zealand. Don't be fooled by the spinach in its name; this is not a true spinach. Doesn't look like one or taste like one, though some find it an acceptable substitute because it stands through the hot summer when true spinach bolts. Chefs have discovered that it is a very good green baked, especially in lasagna. Soak the nut-like seeds before sowing to speed and improve germination. Be patient and don't give up too soon. Only a few plants are needed to fill in your patch because Tetragonia sprawls. Irrigate frequently and pick often to keep the leaves tender and succulent and avoid yellowing. Will withstand frosts to the low 20s. ②

A=¼oz, $1.00 **B**=½oz, $1.80 **C**=1oz, $3.20 **D**=4oz, $6.00 **E**=1lb, $19.00 **K**=5lb, $90.00



❄ = Season-extending variety, hardy through part of the winter. See list on page 55 for more information.



LETTUCE *Lactuca sativa*

1 gram packet sows 25 ft; 2 grams, 50 ft; 1 oz, 500–700 ft. Varieties average 875 seeds/1g pkt, or 1,750 seeds/2g packet. All lettuce is open-pollinated. May be started indoors in March and at regular intervals thereafter, or sowed outdoors as soon as ground can be worked. Many varieties won't germinate in soil temperatures above 75˚ and most shut down above 80˚. Where available, we present data here from a California germination experiment at 84˚.

Hardy. All save icebergs tolerate heavy frost. Grow best in cool weather with ample moisture, many kinds suffer bottom rot and tipburn in heat; select summer varieties carefully. Use shade cloth to keep summer lettuce tender and sweet longer.

Sow every 2 weeks for continuous supply. Lettuce will not head unless thinned frequently and ruthlessly to final distance of 1'. Heavy nitrogen feeders.

Minimum germination soil temperature 35˚, optimal range 40-80˚, optimal temperatures 70-75˚, emergence takes 15 days at 41˚, 7 days at 50˚, 3 days at 68˚, 99% normal seedlings at 77˚ but only 12% normal at 86˚.

Days to maturity are from direct seeding.

LOOSELEAF and OAKLEAF

2712BO Black Seeded Simpson OG (42 days) The earliest and most popular looseleaf variety. "One of our absolute favorites for early season production with heads up to 16" diameter," says New York State market lettuce grower Lisa Bloodnick. Large loose crumpled juicy light-green leaves slightly ruffled and blistered. Inner leaves tender and well blanched. Does not stand heat well; sow as early as the ground can be worked. Probably originally from England circa 1850, this heirloom was introduced by Peter Henderson & Co. of New York around 1875. Germination showed some tolerance to warm temperatures. CCOF-certified. ③

A=2g, $1.00 **B**=4g, $1.80 **C**=14g, $3.00 **D**=28g, $5.00
E=112g, $11.00 **K**=448g, $39.00

2713GO Green Ice OG (45 days) Customers asked us to list Burpee's well-known variety. This shiny crinkly looseleaf with fringed leaf margins is firm and crunchy in salads. Slow to bolt, but gets tough in the centers. No new crop; heldover *seed in short supply*; germinates at 91%. Stellar NOP-certified. ②

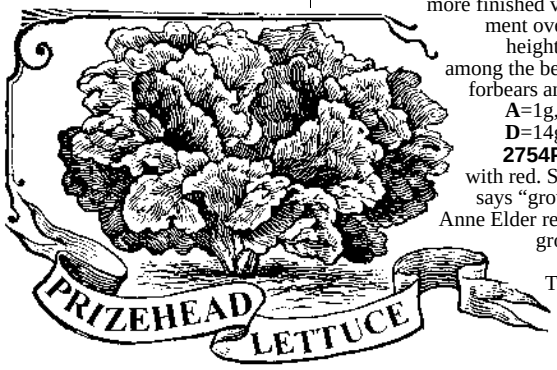
A=1g, $1.70

2716YM Yu Mai Tsai (45-60 days) Imprisoned in our warehouse: too many packets of Yu Mai Tsai. Overcrowded conditions create a hazard for these inmates. Aliases: Sword Leaf or Pointed Leaf lettuce, distinguished by its long thin sword-shaped bright green frilly leaves often snipped, bundled and banded at Chinese markets where it is referred to as "a choy." Origin: Taiwan where it is a very popular vegetable green. Also frequents: Cantonese cuisine. Reward: tender and crispy leaves and stems when harvested at an early stage. A bitter and robust flavor, quite different from typical American lettuce. Good in salads, soups, stews and stir-fries. Warning: Vigorous grower bolts in hot weather, but adapted to late summer and early fall plantings. Armed but not dangerous. Who will help us organize a jail break? All seed is held over; germinates at 90%. ③

A=1g, 80¢ **B**=2g, $1.50 **C**=4g, $2.80 **D**=14g, $6.00
E=28g, $9.00

2719BO Bronze Arrowhead OG (46 days) This Arrowhead scores a bullseye for form and color, developing a gorgeous oakleaf rosette in a dance of green and bronze. Introduced as Bronze Beauty by the Germania Seed & Plant Co, this bronze was given a bronze by the AAS judges in 1947. A good variety for mesclun and cut-and-come-again culture. Very slow to bolt. OT, CCOF-certified. ①

A=1g, $1.30 **B**=2g, $2.40
C=4g, $3.60 **D**=14g, $6.50
E=28g, $12.00 **K**=112g, $45.00



Salad Bowl (46 days) Bright-green frilly notched leaves form compact rosette. Stands heat better than Black Seeded Simpson, but at its best in cool weather, not summer. 1952 AAS bred by Ross Thompson of the USDA. Has survived outside temperatures of 18˚ double-covered under Agribon 19.

2722SB Salad Bowl ②

A=2g, 80¢ **B**=4g, $1.20 **C**=14g, $2.20 **D**=28g, $3.50
E=112g, $6.00 **K**=448g, $18.00 **L**=5lb, $82.00

2723SO Salad Bowl OG CCOF-certified. ③

A=2g, $1.10 **B**=4g, $2.00 **C**=14g, $3.50 **D**=28g, $6.00
E=112g, $12.50 **K**=448g, $46.00 **L**=5lb, $220.00

Red Salad Bowl (46 days) Compact frilly rosettes of spectacular bronze-red oakleaves. Red at tips and on young growth, green at the base of the leaves. Nice buttery flavor. One of our most popular lettuces. A staple mesclun ingredient. Grows quite large in cool weather, but prone to bitterness and bolting in heat. Withstood outdoor temperatures of 14˚ double-covered under Agribon 19. Introduced in 1955. Some warm-temperature germination tolerance.

2728RS Red Salad Bowl ②

A=2g, 80¢ **B**=4g, $1.20 **C**=14g, $2.20 **D**=28g, $3.50
E=112g, $6.00 **K**=448g, $18.00 **L**=5lb, $82.00

2729RO Red Salad Bowl OG CCOF-certified. ③

A=2g, $1.10 **B**=4g, $2.00 **C**=14g, $3.50 **D**=28g, $6.00
E=112g, $12.50 **K**=448g, $46.00 **L**=5lb, $220.00

2731CO Cracoviensis OG (47 days) My absolute favorite of all the lettuces Seed Savers curator M. Schultz shared, unlike any other in size, shape or colors. Cracoviensis is where the red meets the green, making a dazzling twisting rosette with heavy purple accenting, especially towards the center. Plants grow fast and very large and quickly send up seed stalks (a seed grower's dream), even called by Scott Paquin "Bolt-o-viensis," but their tender buttery flavor doesn't give way to bitterness even after they bolt. Customers in New Jersey and Massachusetts have reported success overwintering it. Listed as a distinct type, Asparagus Lettuce, in *The Vegetable Garden* by Vilmorin-Andrieux (1885). Highly prized in China where they peel and eat the thick fleshy stems like asparagus, a practice that restaurant chefs have adopted here. ☙1996. OT-certified. ①

A=1g, $1.30 **B**=2g, $2.40 **C**=4g, $3.50 **D**=14g, $7.00
E=28g, $13.00 **K**=112g, $48.00

2732GO Strela Green OG (47 days) From Alan Kapuler via Schultz. Nikos likened the rough-textured green leaves which to donkey ears. We had never seen anything quite like its large star-shaped rosette. According to Schultz, "pointed spear-shaped leaves erupt from the center like an explosion, spectacular and decorative." Sweet and without bitterness, Strela performed well in summer plantings, withstanding meager heat waves with aplomb. All seed is held over; germinates at 86%. OT-certified. ①

A=1g, $1.50 **B**=2g, $2.80 **C**=4g, $5.20 **D**=14g, $8.00
E=28g, $12.00

2738AO Antares OG (48 days) A shimmery pink and bronze oakleaf growing vigorously to magnificent size. The extra-frilled finely cut bright leaves are colorful and tender, not bitter even in early July. Antares puts on a terrific show especially when started indoors, transplanted early in spring and allowed ample space. Bred by Frank Morton of Wild Garden Seed in Oregon out of a combination of #**2722** Salad Bowl and #**2865** Rouge d'Hiver. OT-certified. ①

A=1g, $1.60 **B**=2g, $3.00 **C**=4g, $5.00 **D**=14g, $10.50
E=28g, $18.00 **K**=112g, $55.00

2740DO Green Deer Tongue OG (48 days) Also known as Matchless, this venerable heirloom goes back to the 1740s. #**2740** and #**2744** are the only deer tongues you will ever want to see in your garden! Characteristic thick green pointed leaves radiating from a compact center. Slow to bolt. Has a rich nutty flavor that doesn't turn bitter. OT-certified. ①

A=1g, $1.30 **B**=2g, $2.40 **C**=4g, $3.60 **D**=14g, $6.50
E=28g, $12.00 **K**=112g, $40.00

2744RO Really Red Deer Tongue OG (48 days) We revered the old Red Deer Tongue for its history and its classic leaf shape, but not for its pallid color and vulnerability to diseases. Morton combined the old-timer with his own creation, #**2773** Hyper Red Rumple Waved, to develop a whole series of Really Red breeding lines. Morton has re-selected his gene pool for the deep red color, pronounced white-green contrasting veins and characteristic pointed deer tongue leaves that attracted us initially. Now a more finished variety with much less variation, a stunning improvement over the original Red Deer Tongue. From Hyper comes heightened resistance to SC, DM, X and TB. Although not among the best summer lettuces, RRDT stands heat better than its forbears and does not bolt as readily. ☙2005. OT-certified. ①

A=1g, $1.60 **B**=2g, $3.00 **C**=4g, $5.00
D=14g, $10.50 **E**=28g, $18.00 **K**=112g, $55.00

2754PZ Prizehead (48 days) Crinkly outer leaves tinged with red. Superior flavor. Very popular market type. Bloodnick says "grows large and heavy in spring, not so big in summer." Anne Elder reports it has produced the "heaviest heads we've ever grown in 23 years." Bolts in heat. Listed 1873 by D.M. Ferry & Co. and offered by Burpee under the name Tomhannock in 1886. ②

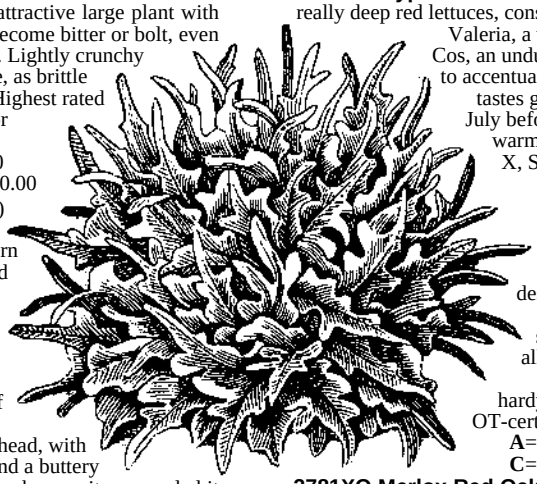
A=2g, 80¢ **B**=4g, $1.20
C=14g, $2.20 **D**=28g, $3.50
E=112g, $6.00 **K**=448g, $16.00

2761RO Red Sails OG (49 days) 1985 All-America winner has become almost synonymous with red leaf lettuce. A most attractive large plant with purplish red-splashed leaves, Red Sails is slow to become bitter or bolt, even in heat. 10–16" rosettes serrated with bubbled frills. Lightly crunchy lobes with a good melting texture. Handle with care, as brittle midribs break easily during washing and packing. Highest rated of 13 lettuces for vigor in OSU trial. Dependable for wholesale markets. CCOF-certified. ①

A=2g, $1.60 **B**=4g, $2.80 **C**=14g, $7.00
D=28g, $13.00 **E**=112g, $45.00 **K**=448g, $130.00

2763CR Della Catalogna Radichetta (49 days) A rustic Italian heirloom lettuce with deeply toothed green oak leaves of a delicate flavor like corn salad and the texture and crunch of escarole. A good variety for braising. ②

A=1g, $1.20 **B**=2g, $2.20
C=4g, $3.80 **D**=14g, $12.00
E=28g, $20.00 **K**=112g, $50.00



2764BO Blushed Butter Oaks OG (49 days) This 1997 Fedco introduction, one of a new class of lettuces developed by Morton, aroused immediate interest. Best described as a compact oakleaf butterhead, with a delightful combination of pink and green colors and a buttery taste, Blushed Butter Oaks was a hit with everyone who saw it or sampled it at our trial. Has some frost tolerance. ☘1997. OT-certified. ①

A=1g, $1.70 **B**=2g, $3.00 **C**=4g, $5.00 **D**=14g, $11.00
E=28g, $20.00 **K**=112g, $64.00

2766YO Australian Yellow OG (50 days) We are hoping this new color in the lettuce palette will catch on. In our 2011 trial the opalescent yellow-green leaves burst out of the gate with rapid growth yet were still holding their quality on July 19 when Waldmann's had bolted. Glossy yellow in the early stages, seedlings take on more green pigmentation as they mature, with the crinkly quality of a spinach and a sweet taste augmented by the barest hint of bitter. Frank Morton's strain is the best we have found. Though Australia is more famous for its squashes, this is another worthy émigré from Down Under. OT-certified. ①

A=1g, $1.60 **B**=2g, $3.00 **C**=4g, $5.00 **D**=14g, $11.00
E=28g, $18.00 **K**=112g, $62.00

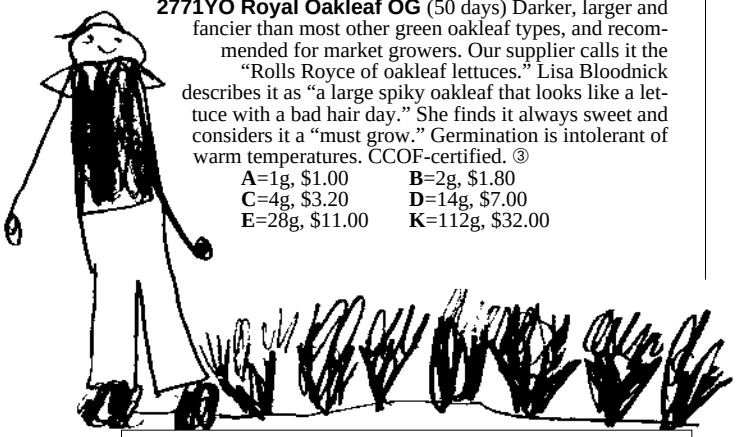
Les Oreilles du Diable OG (Devil's Ears) (50 days) Crop failure; *not available in 2014.*

2768CO Lingua di Canarino OG (Canary Tongue) (50 days) Unsure if a canary tongue is anything like a forked tongue, or if Jefferson Airplane's old admonition to "stay out of the way of the loose-tongued liar" is apposite here. Regardless, as lettuce Canary Tongue need not be avoided, quite the contrary, it is good. Lingua is a refined oakleaf that grows larger and stands longer than the original Oakleaf without bolting or getting bitter. Mild-tasting light-green 8" rosettes. Performs well in fall. Originally from Europe. OT-certified. ①

A=1g, $1.30 **B**=2g, $2.50 **C**=4g, $3.60 **D**=14g, $7.00
E=28g, $13.00 **K**=112g, $45.00

2769WL Waldmann's (50 days) Large handsome heads of bright green crinkly leaves. An attractive Grand Rapids type for market. Appearance and texture superior to Green Ice, but not as heat tolerant. Gets bitter toward mid-July, earlier in drought. Pre-1880 heirloom. Showed some warm-temperature germination tolerance. ②

A=2g, 80¢ **B**=4g, $1.20 **C**=14g, $2.20 **D**=28g, $3.50
E=112g, $6.00 **K**=448g, $16.00



2771YO Royal Oakleaf OG (50 days) Darker, larger and fancier than most other green oakleaf types, and recommended for market growers. Our supplier calls it the "Rolls Royce of oakleaf lettuces." Lisa Bloodnick describes it as "a large spiky oakleaf that looks like a lettuce with a bad hair day." She finds it always sweet and considers it a "must grow." Germination is intolerant of warm temperatures. CCOF-certified. ③

A=1g, $1.00 **B**=2g, $1.80
C=4g, $3.20 **D**=14g, $7.00
E=28g, $11.00 **K**=112g, $32.00

Full Day
Morning, two lambs tottering, still wet.

Afternoon, lobbyists line up,
emphasizing the costs to their clients of telling us what we eat.

Evening, plant seeds to show faith and control over the future.

2773HO Hyper Red Rumple Waved OG (50 days) If you are drawn to really deep red lettuces, consider Hyper Red. Selecting from a cross between Valeria, a very red cold-tolerant lollo rossa, and Wavy Red Cos, an undulating savoyed red romaine, Morton bred Hyper to accentuate pigmentation and ruffling. The stunning result tastes good with a pleasing texture. Holds for a while in July before succumbing to heat. Good cold tolerance. No warm-temperature germination tolerance. Resistant to X, SC, DM and TB. OT-certified. ①

A=1g, $1.60 **B**=2g, $3.00
C=4g, $5.00 **D**=14g, $10.50
E=28g, $20.00 **K**=112g, $62.00

2775FO New Red Fire OG (51 days) Offered as a substitute for Red Sails, Fire gained a well-deserved popularity with commercial growers. Has Sails' characteristic ruffled leaves, though slightly lighter coloration, and good size. Best of all, it has been among the last to bolt in our lettuce patch, lasting as late as July 29. Also quite cold-hardy. Tender sweet flavor with almost no bitterness. OT-certified. ①

A=1g, $1.40 **B**=2g, $2.50
C=4g, $4.00 **D**=14g, $10.50

2781XO Merlox Red Oak OG (53 days) Frank Morton's first release of a new class of "Merlox variations" combines the incredibly dark pigmentation of #**2789** Merlot with the superior flavor of larger Emerald Oak. The resulting showy oak leaves are an extreme deep maroon with just a hint of green in their centers, compact in form with wavy margins, and not usually very bitter despite their color. Merlox shows promise as a winter lettuce. Left outdoors in Central Maine with no row cover, mulched only by a generous snow cover, 67% overwintered and were ready to eat in early May. Bred with strong horizontal resistance to DM and SC. OT-certified. ①

A=1g, $2.50 **B**=2g, $4.80 **C**=4g, $9.00 **D**=14g, $22.00
E=28g, $42.00 **K**=112g, $145.00

2783SB Slobolt (53 days) Slow early growth is the key to Slobolt's success as a summer lettuce. A Grand Rapids-type with much paler green leaves than Waldmann's, Slobolt often will hold well into July without bolting. Slobolt is versatile: one grower in New York reported good results growing it in winter under lights as well as tightly spaced in his summer garden. Introduced 1946 by the USDA. Showed some ability to germinate in warm temperatures. ②

A=2g, $1.30 **B**=4g, $2.50 **C**=14g, $6.50 **D**=28g, $10.00
E=112g, $28.00

2784FO Flashy Green Butter Oak OG (54 days) Spectacular marriage of the quintessential oakleaf form with the speckling of the troutbacks. Not only beautiful but also amazingly tasty, crunchy with a delightful buttery texture. Emerald Oak crossed with Flashy Trout Back yields rich lime-green leaves with pronounced dark speckles. Truly lettuce as art form, with Morton mixing texture, color, flavor and shape like a master. OT-certified. ①

A=1g, $1.60 **B**=2g, $3.00 **C**=4g, $5.00 **D**=14g, $10.50
E=28g, $18.00 **K**=112g, $56.00

2785TO Italienischer OG (55 days) If Royal Oakleaf is the Rolls Royce of oakleaf lettuce, then Italienischer must be the Maybach (without the sticker shock!) Compared to Royal it was more vigorous with bigger outer leaves, a better taste and texture, and less bitterness. Good, juicy and mild-flavored. Schultz described it as "so big and beautiful." As with many of our favorite lettuces, we got the seed stock from her. Upright sturdy 18" bright green plants provide an incredible bounty of crisp delicious leaves. They can take some heat and are slow to bolt. Give these huge beauties plenty of space. Some is black-seeded, some white-seeded, both true-to-type. OT-certified. ①

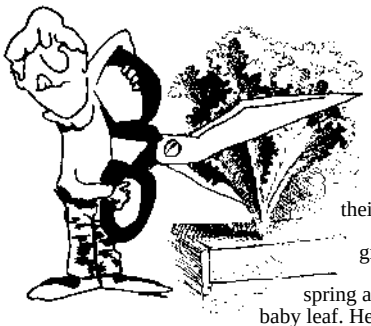
A=1g, $1.30 **B**=2g, $2.40 **C**=4g, $3.60 **D**=14g, $7.00
E=28g, $12.00 **K**=112g, $40.00

2786WO Red Tinged Winter OG (60 days) A leaf lettuce for three seasons. One of the hardiest in Turtle Tree's trials and a survivor in Roberta's overwintering test. Turtle Tree, our original source, claimed seedlings can withstand –5˚ temperatures. Hildy Danforth of Shelburne, NH, said that "it was the best I've seen in my fall greenhouse and I've grown every lettuce with the word 'winter' in its name." Sow to mature in fall or late fall, or start in fall to overwinter and rally for major production in spring. The slightly ruffled leaves are green in the center and lightly tinged with bronze toward the tips. They turn quite bitter in heat, so not for summer production. WA-certified. ❄ ①

A=1g, $1.50 **B**=2g, $2.60 **C**=4g, $4.00 **D**=14g, $7.00
E=28g, $13.00 **K**=112g, $48.00

2787BO De Morges Braun OG (64 days) Our trialer called de Morges the "bronze beauty." "So beautiful and so tasty," affirms Karen Pratt of Jacksonville, VT. Noteworthy, among the hundreds of lettuces we've grown, for its shimmery color and smooth buttery texture. Grows upright like a romaine as it matures, the center forming a green contrast to the pink outer leaves. De Morges grows slowly, never develops bitterness and is one of the last to bolt. We owe our awareness of this unique lettuce to Schultz. OT-certified. ①

A=1g, $1.40 **B**=2g, $2.50 **C**=4g, $3.60 **D**=14g, $9.00
E=28g, $15.00 **K**=112g, $50.00



CUTTING LETTUCE

2788OO Oscarde OG (30 days baby, 45 days mature) This industry standard has inspired several imitations that aren't quite as good. The classic miniature oakleaf, growing low to the ground. Its red leaves, darkest of their type in our trials, shade to bright green at their hearts. Ideal for greenhouse culture in cold weather, also a good performer outdoors in spring and fall. May be cut for mesclun or baby leaf. Heldover seed tested at 81%. Resists most races of DM. OT-certified. ❄ ①

A=1g, $2.50 **B**=2g, $4.80 **C**=4g, $8.00 **D**=14g, $22.00 **E**=28g, $40.00

2789MO Merlot OG (32 days baby, 60 mature) William Woys Weaver correctly predicted that this lettuce would become a classic. Always a standout in our trials, its intense burgundy color the richest we have ever seen. The Dutch company who bred it named it Galactic, but Cook's Garden trumped them by calling it Merlot. This merlot adds as much to your baby salad mix as a good wine adds to your dinner, providing incredible color, excitement and full-bodied flavor. Slow to grow, slow to bolt, plants never achieve much size or density, but are ideal for the baby leaf trade. Not for mature-head production, so may be spaced more closely than other varieties. According to Mountain Dell Farms (growing at 1400' in the Catskills), can stand outside temperatures to 14˚ when double-covered under Agribon 19. Showed good resistance to bottom rot this past challenging season. Germinates poorly in warm temperatures. Resistant to X, DM, SC and TB. OT, CCOF-certified. ①

A=1g, $1.80 **B**=2g, $3.20 **C**=4g, $5.00 **D**=14g, $12.00 **E**=28g, $21.00 **K**=112g, $75.00

2791TO Tango OG (45 days) For many commercial growers, Tango is the looseleaf of choice for overwintering and for productivity in cool weather. A frilly standard in salad mixes and mesclun adding loft and interesting texture. Could be called the endive of lettuces for its deeply cut pointed leaves. The pleasant flavor, however, has none of endive's bitterness. Bolts readily in hot summer, so plant accordingly if you want it to grow to full maturity. MOSA-certified. ❄ ②

A=1g, $1.20 **B**=2g, $2.20 **C**=4g, $3.40 **D**=14g, $7.00 **E**=28g, $10.00 **K**=112g, $35.00

Revolution (48 days) You say you want a revolution? Not this year. We are looking for a strain more true to type. *Not available in 2014.*

2793LO Dark Lollo Rossa OG (53 days) A much darker version of #**2796**, holding its color even under row covers, in tunnels or during prolonged cloudy periods. Our trialer describes it as "fat, curly and very red." Adds color, texture and loft to baby leaf mixes. Begin snipping after only four weeks. Develops bitterness if allowed to size up in heat. CCOF-certified. ②

A=1g, $1.20 **B**=2g, $2.20 **C**=4g, $3.40 **D**=14g, $5.00 **E**=28g, $9.00 **K**=112g, $30.00

2795VO Lollo di Vino OG (56 days) Called by its originator Morton a "distinctive little frizzlehead," di Vino stands out for its extreme dark purple color that originated in its Merlot parentage. Has the beautiful ruffles and curls of vintage lollo, but a mildness uncharacteristic of deeply pigmented lollos. Its distinctive lack of bitterness allows the harvest to extend longer into summer than any other dark lollos we have tried. That and its extreme beauty assure it a place in my patch. Compact. OT-certified. ①

A=1g, $1.80 **B**=2g, $3.50 **C**=4g, $6.00 **D**=14g, $16.00 **E**=28g, $28.00 **K**=112g, $90.00

2796LR Lollo Rossa (58 days) For loft and texture, used in salad mixes as an accent or garnish, this ornamental delight was enthusiastically embraced by gourmet restaurants. Frizzy foliage is light red on top, light green at base, melding into an eye-catching display. Very cold hardy. This strain is not as colorful as #**2793** and #**2795**, but it was milder, less bitter, and slower to bolt than others we trialed. Introduced in 1987 by Royal Sluis. ③

A=1g, $1.00 **B**=2g, $1.80 **C**=4g, $3.00 **D**=14g, $7.00 **E**=28g, $11.00 **K**=112g, $32.00

Days getting lighter? Avoid disappointment! Consult our website **fedcoseeds.com** to find if your favorites are still in stock or, if not, worthy substitutes for them.

BIBB and BUTTERHEAD

This season's 15" of rain between mid-May and mid-June put all our varieties to a severe test for bottom rot.

2803TT Tom Thumb (46 days) Miniature butterhead makes an early small tightly bunched head. Outer leaves light-medium green, centers creamy white with a pleasant buttery taste. Very attractive for early markets. Can be spaced quite closely as the heads seldom exceed 5" in diameter. Introduced in England by H. Wheeler & Sons in 1858, it came to the States ten years later courtesy of Gregory. One customer writing to Burpee's in 1894 said, "It is just what the gardener wants…a good dwarf variety, a quick grower." ②

A=2g, 80¢ **B**=4g, $1.20 **C**=14g, $2.20 **D**=28g, $3.50 **E**=112g, $6.00 **K**=448g, $18.00

2805BM Bronze Mignonette (46 days) This small ruffled bronze-tinged butterhead captivated me in the trials. Because Mignonette is only slightly larger than Tom Thumb, it is ideal for baby vegetable enthusiasts. Peter Henderson named and marketed it to several seed houses around 1898. ②

A=2g, 80¢ **B**=4g, $1.20 **C**=14g, $2.20 **D**=28g, $3.50 **E**=112g, $6.00 **K**=448g, $16.00

2811BU Buttercrunch (50 days) Our trials evaluator calls it "the cucumber of lettuce, smooth and soothing with a green refreshing flavor." A 1963 All-America selection developed by Dr. G.L. Raleigh at Cornell. Dark green outer leaves with creamy center heart. Bloodnick praises its "sweet, succulent broad mid-ribs." Slow to bolt, but can be prone to bottom rot. Far and away our best-selling lettuce variety; more than 3,200 packets in 2013. Some ability to germinate in warm temperatures. ②

A=2g, 80¢ **B**=4g, $1.20 **C**=14g, $2.20 **D**=28g, $3.50 **E**=112g, $6.00 **K**=448g, $15.00

2814NO North Pole OG (51 days) We don't wait for Santa Claus—we have a seed grower out west producing this popular extremely cold-hardy butterhead for us. Protected only by snow cover, all of Donna Dyrek's plants survived a mild Maine winter outdoors. Can be set out under cover 2–3 weeks before first frost to aim for 4–6" plants at the onset of winter weather. Will resume vigorous growth as days grow longer, tolerating spring frosts. Elegant lime-green 6–8" buttery heads, sweet and tasty, won my praise on June 21 in my 1999 trial but by July 3 had turned bitter and bolted. Not for summer, but suited for the other seasons. OT-certified. ❄ ①

A=1g, $1.60 **B**=2g, $3.00 **C**=4g, $5.50 **D**=14g, $9.00 **E**=28g, $16.00 **K**=112g, $50.00

2816MO Winter Marvel OG (52 days) Polly Gottesman of Pumpkin Ridge Gardens, North Plains, OR, wrote, "Here in Zone 7 Winter Marvel is bar-none the best overwintering lettuce we grow…We start harvesting outer leaves for salad mix in December…they continue producing without bolting through March." A large fancy light green butterhead recommended for fall production and overwintering where the climate permits. Grows rapidly, but bolts readily in summer heat. If you are sowing in spring for an early summer butterhead, be aware that the harvesting window is very narrow. An old European variety. Do not sow in soil temperatures over 80˚. No new crop. Heldover seed germinates 87%. *Seed in short supply; order early.* OT-certified. ❄ ①

A=2g, $1.60 **B**=4g, $3.00

2828PO Pirat OG (55 days) From Germany, also known as Sprenkel and Brauner Trotzkopf. Elegant green butterhead with light-brown pebbling. Heads like loose large softballs at maturity. Has a delicious smooth taste with creamy texture, and holds well except in prolonged wet spells. Descended from Merveille des Quatre Saisons but much more bolt resistant. All our seed is held over; 88% germ. OT-certified. ①

A=1g, $1.50 **B**=2g, $2.80 **C**=4g, $5.00 **D**=14g, $10.00 **E**=28g, $18.00 **K**=112g, $60.00

Pest: Aster Leafhopper (vector for Aster Yellows disease)
Cultural controls: control perennial broadleaf weeds near lettuce plantings, plow lettuce fields immediately after harvest.

Pest: Slug
Cultural controls: avoid mulch or nearby grassy areas.
Material: Sluggo (**8911-6**)

Disease: Bottom Rot
Cultural controls: rotate with grass-family green manures, plant in well-drained soil or on raised beds, more upright varieties escape infection.

Diseases: Downy Mildew, Grey Mold, White Mold
Cultural controls: rotation, reduce duration of leaf wetness, plant parallel to prevailing winds, use wide spacing, control weeds, use well-drained fields in spring and fall.
Material: Actinovate (**8851**)

2830SK Skyphos (55 days) The perfect red butterhead has been my Holy Grail. Skyphos is the best and most beautiful lettuce I have found in a quarter century of trialing. A revelation both in 2011 and 2012, it required several years of sleuthing to track its source. The subtle interplay of its dark red outer leaves with its contrasting lime-green centers creates indescribable ethereal almost-blue wavy shadings that I had never seen before in lettuce. Its interior leaves are so smooth and buttery that I can rightfully describe their texture as silken. Sweet, tender and amazingly heat-tolerant, its generous heads still showed no signs of bolting or any bottom rot on July 19, 2011, from an April 26 sowing. Because the seed is as expensive as gold, our packet sizes are smaller than accustomed. Still, our A-size packet contains nearly 200 seeds at a cost of less than a penny and a half each. So precious you will want to start in pots rather than risk direct-seeding. Tolerant to DM1-26 and LMV. ③ **NEW!**
A=0.2g, $2.70 **B**=0.4g, $5.20 **C**=1g, $12.00 **D**=4g, $45.00 **E**=16g, $170.00

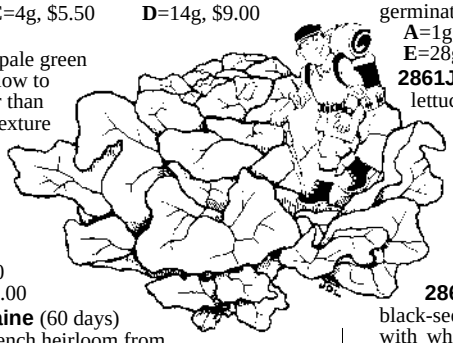
2831SO Speckled Amish OG (55 days) "Why put flowers on the table when there's a Speckled Amish bibb to grace the expanse? We float one in a bowl and wait for the applause," lauds Scout Proft. Here is an ornamental bibb of spectacular beauty, its apple-green leaves splashed with maroon flecks, a stunner whether in your garden, on your table or in your salad. Small firm mild-flavored heads shaped like Merveille des Quatre Saisons, centers with soft leaves blanching creamy yellow. Mennonites brought seed in a covered wagon from Lancaster County, PA, to Ontario in 1799. Introduced into commerce in 1880 as Golden Spotted. Morton, who got the stock seed from the Seed Savers Exchange, has been selecting to alleviate tipburn. OT-certified. ①
A=1g, $1.50 **B**=2g, $2.80 **C**=4g, $4.80 **D**=14g, $9.00 **E**=28g, $16.00 **K**=112g, $48.00

2834VO Sweet Valentine OG (56 days) A real sweetheart of a lettuce, Valentine combines magnificent beauty with mild sweet taste. Beginning as a large spreading bronzed butterhead with rounded veined leaves, it matures into a romaine shape. Has been very slow to bolt even in hot dry conditions. Flavor is more delicate, soothing and less bitter before it assumes romaine configuration. One of my favorites. Heldover seed tests at 90%. CCOF-certified. ⑤
A=1g, $1.40 **B**=2g, $2.60 **C**=4g, $4.00 **D**=14g, $9.00 **E**=28g, $16.00 **K**=112g, $50.00

2836YO Red-Eared Butterheart OG (56 days) Not a true butterhead, instead looks like a cross between #**2744** Really Red Deer Tongue and a red Boston. Gets its red "ears" neither from embarrassment nor from excessive cold, instead from Frank Morton's inspired breeding. The ears—dark pointy leaves—are shorter, broader and more buttery and folded than RRDT and the plant is less upright. Pronounced veins are green, shading toward red in the center, and contrast with its dark red leaves to give it its striking good looks. Completely free of bottom rot, even in wet 2011. Allow generous space to accommodate its vigorous growth. Still showed a small amount of variation in my trial. Heldover seed tests at 86%. OT-certified. ①
A=1g, $1.70 **B**=2g, $3.20 **C**=4g, $6.00 **D**=14g, $12.50 **E**=28g, $22.00 **K**=112g, $80.00

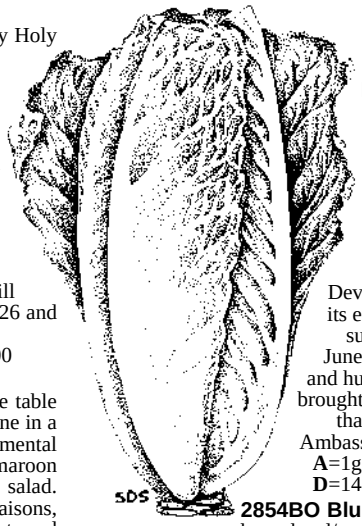
2839KS Kagraner Sommer (58 days) Elegant pale green heads of exceptional quality. "For years has been our main summer lettuce. A great heat resister," lauds Anne Elder. ②
A=2g, $1.00 **B**=4g, $1.80 **C**=14g, $5.00 **D**=28g, $8.00 **E**=112g, $20.00 **K**=448g, $50.00

2841NO Nancy OG (58 days) The best one-word description of this elegant butterhead rhymes with its name. Thick medium-green leaves make extra-large very tight tasty heads that usually hold well in the field. Smooth and buttery with a delectable taste and texture. A standout both for commercial growers and home gardeners, though it did struggle with severe bottom rot this season. OT-certified. ①
A=1g, $1.80 **B**=2g, $3.40 **C**=4g, $5.50 **D**=14g, $9.00 **E**=28g, $16.00 **K**=112g, $48.00



2846KP Kinemontpas (60 days) This pale green butterhead grows enormous and is very slow to bolt even in heat. Darker green and larger than Kagraner Sommer, with a dense buttery texture and pleasing mellow taste. Lettuce collector M. Schultz brought this classic French heirloom to our attention. "A winner," assesses trialer Heron Breen. Heldover seed tests at 84%. ②
A=1g, $1.00 **B**=2g, $1.80 **C**=4g, $3.20 **D**=14g, $7.00 **E**=28g, $11.00 **K**=112g, $35.00

2849WD Winter Density Bibb/Romaine (60 days) Also known as Craquerelle du Midi, a French heirloom from the 19th century. Is it a bibb or a romaine? Any way you look at it, its thick tender dark green leaves make superb eating. Starts out looking like a bibb then wrapper leaves fold tightly, form a head like a romaine when mature. Combines the substance of romaine with the tender succulence of bibb. ❄ ②
A=2g, $1.00 **B**=4g, $1.80 **C**=14g, $2.80 **D**=28g, $5.00 **E**=112g, $10.00 **K**=448g, $30.00



ROMAINE and COS

According to Twin Oaks grower Pam Dawling, romaine lettuces have double the vitamin A and C content of the other kinds.

2852PO Pandero OG (44 days baby, 63 days mature) Runaway star of my 32 varieties in the 2013 lettuce medley, this very deep purple version of a compact Winter Density–type mini-romaine stole the show. It can be harvested small for salad mix or baby romaine or allowed to mature fully to a striking self-contained 6" head. Develops pronounced color early and keeps it through its entire growth cycle. Both heat- and cold-tolerant, it suffered only sparse bottom rot despite our cold wet June, refusing to bolt even in early July's extreme heat and humidity. Sweet and mild. Originally from England, brought to the States by Adaptive Seeds, an Oregon outfit that evolved from the stewardship work of their Seed Ambassadors project. OT-certified. ① **NEW!**
A=1g, $2.30 **B**=2g, $4.50 **C**=4g, $8.00 **D**=14g, $19.00 **E**=28g, $35.00 **K**=112g, $120.00

2854BO Blushed Butter Cos OG (49 days) A combination butterhead/romaine with ruffled savoyed leaves dappled in an attractive palette of reds and greens. Butter Cos was judged to be #1 for taste out of more than 100 lettuces in our 1996 trial. Remarkably crisp for such a buttery taste. ☙1997. OT-certified. ①
A=1g, $1.70 **B**=2g, $3.00 **C**=4g, $5.00 **D**=14g, $11.00 **E**=28g, $20.00 **K**=112g, $60.00

2856JO Mayan Jaguar OG (51 days) What manner of cat is this? Not having ever seen a jaguar up close, I can only imagine how the mottled maroon spots on the dark green ruffled leaves of this lettuce might have suggested the markings on a jaguar's coat to Frank Morton. Although I've seen a lot of these trendy splotched lettuces in the last decade, this cat wins the blue ribbon for most vibrant color definition. And it has great flavor, too, sweet juicy veins, blushed pink hearts and what the breeder refers to as "that bone crusher romaine crunch!" Because it gets off to such a quick start, yet doesn't grow very large or thrive in the most intense July heat, it is a great candidate for early salad or mesclun. Fierce colors, snarly crunch, but really a pussycat at heart. Heldover seed tests at 84%. OT-certified. ①
A=1g, $2.40 **B**=2g, $4.50 **C**=4g, $8.00 **D**=14g, $19.00 **E**=28g, $35.00

2858FO Forellenschluss OG (56 days) Called by Bloodnick "the Jackson Pollack of lettuces." Also known as Freckles or Trout Back, an heirloom from Arche Noah, the Austrian genetic preservation project. An absolutely gorgeous romaine with the delicate taste and texture of a butterhead, distinguished for its deep green leaves flecked with wine-red splotches. Lately we've seen increasing variation in the coloration and degree of splotching. The best-tasting of the 50 lettuces in our 1998 trial. Very buttery tender leaves may be harvested at 4–6" for mesclun or allowed to grow full size for maximum ornamental benefit. William Woys Weaver traced Forellenschluss back to 1793; it was a dwarf variety of Spotted Aleppo developed in Germany. More upright and cup-shaped than #**2831** Speckled Amish, with larger and darker splotches and better heat tolerance. One of our four most popular lettuces. Some warm-temperature germination tolerance. CCOF-certified. ③
A=1g, $1.10 **B**=2g, $2.00 **C**=4g, $3.30 **D**=14g, $7.00 **E**=28g, $11.00 **K**=112g, $25.00

2859MR Majestic Red (60 days) Fancy savoyed rich bronze-red leaves make Majestic positively gorgeous. Cylindrical "head" has a somewhat spreading habit. One of the slowest-bolting romaines in our trial and much in demand in recent years. Developed by Sunseeds. All seed is held over; germinates at 84%. ②
A=1g, $1.10 **B**=2g, $2.00 **C**=4g, $3.30 **D**=14g, $7.00 **E**=28g, $11.00 **K**=112g, $25.00

2861JO Jericho OG (60 days) Has become the classic summer romaine lettuce for warm regions. If the walls are tumbling down on your summer lettuce, try Jericho, bred in Israel's hot dry climate to stand high temperatures. An imposing romaine, under fertile conditions it can grow dense hefty 2' tall heads of light green sword-shaped upright leaves. Yet it remains crisp, juicy and unusually sweet, most years resisting TB or bolting well into July. Remained attractive even in a bad year and mostly resisted bottom rot. OT-certified. ①
A=1g, $1.50 **B**=2g, $2.60 **C**=4g, $4.20 **D**=14g, $10.00 **E**=28g, $18.00 **K**=112g, $50.00

2865RH Rouge d'Hiver (65 days) The true Rouge d'Hiver, black-seeded, with much deeper red outer-leaf coloration than Brune d'Hiver with which it is sometimes confused. Inner leaves are green with deeply bronzed tip, an attractive color combination. Forms a semi-open romaine head with excellent flavor, especially in cold weather. Develops pronounced bitterness in summer heat. *Hiver* means 'winter' and Rouge is more suitable for fall production or overwintering than for summer. French 1840s heirloom listed by Vilmorin in 1885. ❄ ②
A=2g, 80¢ **B**=4g, $1.20 **C**=14g, $2.20 **D**=28g, $3.50 **E**=112g, $6.50 **K**=448g, $22.00

2866PO Plato II OG (65 days) A lettuce fit for a philosopher-king, Plato sets a high standard for sweet taste in a romaine, holding its quality well into summer without bitterness, bolting or any tendency to tipburn. Morton also found it more resistant to DM and SC than any of the other green romaines in his plot. Attractive dark green slightly ruffled heavily veined leaves. The favorite lettuce of Ohio market grower Harv Roehling (profiled in our 2011 catalog). "Great flavor, handles heat better than most, great looking," he says. OT-certified. ①

A=1g, $1.40 **B**=2g, $2.50 **C**=4g, $4.20 **D**=14g, $9.00
E=28g, $14.00 **K**=112g, $42.00

2874LO Olga OG (66 days) Elegant lime-green Olga won our hearts in our 2006 lettuce trials. Big upright 8" oval heads with big hearts, big flavor and slightly fringed leaves. So sweet, crisp and buttery that Morton thinks she must have some butterhead in her background. Stood considerable heat before developing slight tipburn and bitterness in August. All seed is held over; germinates at 86%. OT-certified. ①

A=1g, $1.50 **B**=2g, $2.80 **C**=4g, $4.80 **D**=14g, $10.50
E=28g, $20.00

Marshall OG (67 days) No crop this year; *not available in 2014.*

2879PI Parris Island Cos (68 days) The standard market romaine developed by Clemson University and the USDA in 1952. Upright 8–9" heads fold inward to form compact centers. Interior greenish-white. Resistant to TB and bolting, even in heat. Irrigation improves its texture. One grower praised its rapid emergence in his pre-sprouting setup. Cos is an island in the Dodecanese region of Greece where this type of lettuce was named. Parris Island is in South Carolina. ②

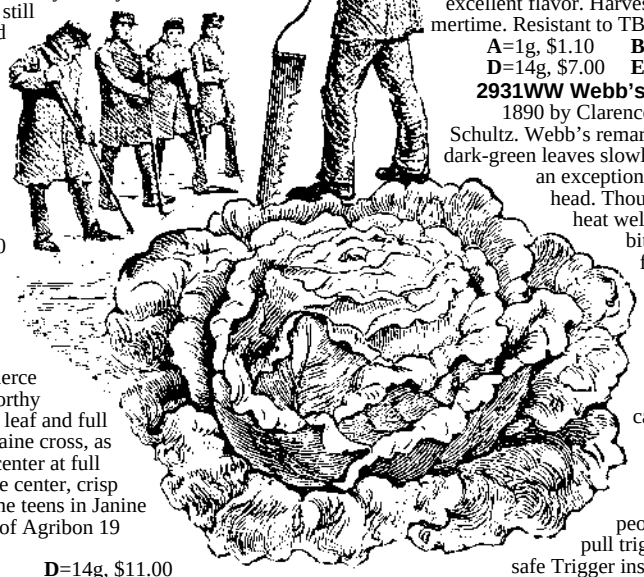
A=2g, 80¢ **B**=4g, $1.20 **C**=14g, $2.20 **D**=28g, $3.50
E=112g, $6.00 **K**=448g, $15.00

2883CO Crisp Mint OG (70 days) Also known as Erthel. Named for its ruffled mint-leaf appearance, not for any minty flavor. Good size, exceptional crispness and sweet flavor with little bitterness even in mid-July. This long-standing dark green romaine with an open habit and a rounded top was a standout two consecutive years. Notes from my original trial in 1999: "Lovely and delicious, crisp and sweet. Nice size, ruffled leaves, GET THIS!!" Breen has found it "biteable, chewy, with a great texture… surprisingly good!" Slow to bolt, though some tendency to TB in July heat. IA-certified. ②

A=1g, $1.40 **B**=2g, $2.60 **C**=4g, $4.20 **D**=14g, $10.00
E=28g, $18.00 **K**=112g, $60.00

2886WO Winter Wonderland OG (70 days) Did you say wintah? Despite the progression of global warming, Maine is still sometimes a winter wonderland as we were reminded last March. It gets cold enough that we really appreciate a lettuce that makes it through the rigors. Winter Wonderland was one of the lettuces to survive Roberta's over-wintering test. A tall erect romaine with dark green leaves, Wonderland is slow to bolt in heat but we recommend it for farming the dark side of the calendar. White seed. Heldover seed tests at 85%. OT-certified. ❄ ①

A=1g, $1.30 **B**=2g, $2.40 **C**=4g, $3.60
D=14g, $9.00 **E**=28g, $17.00 **K**=112g, $55.00



BATAVIAN

Batavian lettuces generally have good hot weather germination, and excellent heat and cold tolerance.

2905DO Cardinale OG (48 days) This alluring wine-red European batavian disappeared from commerce for a while before Frank Morton rescued it. And a worthy rescue it was, for Cardinale is a classic both for baby leaf and full head production. Looks a little like a butterhead-romaine cross, as the open rosettes fold together like a romaine in the center at full maturity. Shiny red leaves on the outside, green in the center, crisp and juicy with some heft. Survived temperatures in the teens in Janine Welsby's unheated greenhouse under a double layer of Agribon 19 topped with old bed sheets. OT-certified. ①

A=1g, $1.70 **B**=2g, $3.00 **C**=4g, $5.00 **D**=14g, $11.00
E=28g, $20.00 **K**=112g, $70.00

2907SO Sierra OG (50 days) A red-tinged French batavian renowned for its extraordinary seedling vigor, resistance to tipburn and reluctance to bolt even in midsummer heat. Has compact upright form. Revered among market growers, it especially stands out in late July when others have rotted or bolted. We have harvested spring-planted marketable specimens as late as Aug. 6. Crispy and tasty. Developed by Vilmorin in 1992. All seed is held over, testing at 86%. No new crop; seed in short supply. *Order early!* Resists DM, tolerates LMV. CCOF, QCS-certified. ①②

A=1g, $1.50

2908TO Concept OG (51 days) The Concept here is a combination of a batavian with a romaine. As the plant reaches full maturity, the whorling thick succulent juicy medium-green leaves start to close up at the top. Can be used for baby lettuce or allowed to mature into a vase-like bunch. As with most batavian types, it is relatively tolerant of hot weather and rarely bitter. Two lots of heldover seed with a minimum germ of 85%. OT-certified. ①④

A=1g, $1.30 **B**=2g, $2.40 **C**=4g, $4.00 **D**=14g, $10.00
E=28g, $18.00 **K**=112g, $55.00

2918PB Pablo (68 days) Pablo bears a superficial resemblance to a red iceberg with much the same attraction, but is a batavian, not a crisphead. Its larger plants form loose heads of beautiful upright rosettes surrounded by wide wavy-edged flat leaves. Bronze coloration on the outside leaves contrasts strongly with the green interiors lending a striking metallic sheen. Very sweet and mild with some bitterness in the ribs, slow-growing and extremely heat resistant. Always one of the last five to bolt in my trials—sweet to the bitter end. Lovely enough to stand as an ornamental, but also one of the best-tasting in the patch. From Seed Savers Exchange. ②

A=1g, $1.30 **B**=2g, $2.40 **C**=4g, $4.00 **D**=14g, $10.00
E=28g, $18.00 **K**=112g, $55.00

2921NO Anuenue OG (72 days) Johnny's deserves credit for popularizing Anuenue. Its mellifluous Hawaiian name (pronounced AH-new-ee-new-ee) means 'rainbow' even though it is a uniform dark green. Anuenue sure doesn't look like much in June when most other lettuce is in full glory, but as the days get shorter and the heat gets stronger it really comes into its own. In late July and even early August, this 1987 University of Hawaii product has no peers for crispness and sweetness, and never develops even the faintest hint of bitterness. Slow growth is its secret. It remains compact as it matures, surrounding its round tightly-packed heart with crisp outer leaves. Unlike most lettuces, seed will germinate at 80˚. Also has some winter hardiness, surviving teen temperatures under Agribon 19 and old bed sheets in Welsby's unheated greenhouse. CCOF-certified. ①

A=1g, $1.30 **B**=2g, $2.40 **C**=4g, $4.00 **D**=14g, $10.00
E=28g, $18.00 **K**=112g, $55.00

CRISPHEAD or ICEBERG

According to Vaugan's 1904 catalog, Iceberg gets its name from the small indentations in the leaves which are constantly filled with dewdrops giving them a crystalline appearance.

2922RI Red Iceberg (63 days) For burgundy exterior coloration, compact medium-sized heads, great reliability and pleasing sweet flavor, an attractive alternative to green iceberg. Interior shades to green. Heads resist getting soft and mushy in the heat for a relatively long time. Heldover seed germs at 85%. ②

A=1g, $1.40 **B**=2g, $2.50 **C**=4g, $4.00
D=14g, $10.00 **E**=28g, $18.00 **K**=112g, $55.00

2925SU Summertime (70 days) An iceberg that keeps its head in the heat! Summertime is an Oregon State University release with uniform compact dense medium-sized heads of excellent flavor. Harvest iceberg well into July with Summertime. Resistant to TB. ②

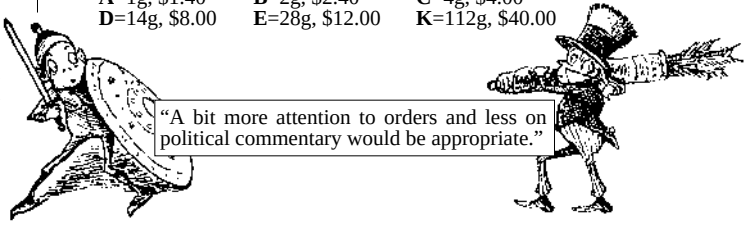
A=1g, $1.10 **B**=2g, $1.80 **C**=4g, $3.20
D=14g, $7.00 **E**=28g, $11.00 **K**=112g, $36.00

2931WW Webb's Wonderful (72 days) Introduced 1890 by Clarence Webb in England, came to us via Schultz. Webb's remarkable large-veined lightly savoyed dark-green leaves slowly form a very large crisphead with an exceptional buttery mild flavor like a butterhead. Though our trial notes indicate it stands heat well, bolts reluctantly, and doesn't get bitter, Deborah Jaffe preferred it as a fall lettuce. Delicious for grazing. I start harvesting leaves long before heads form. ②

A=2g, 80¢ **B**=4g, $1.20
C=14g, $2.00 **D**=28g, $3.20
E=112g, $6.00 **K**=448g, $20.00

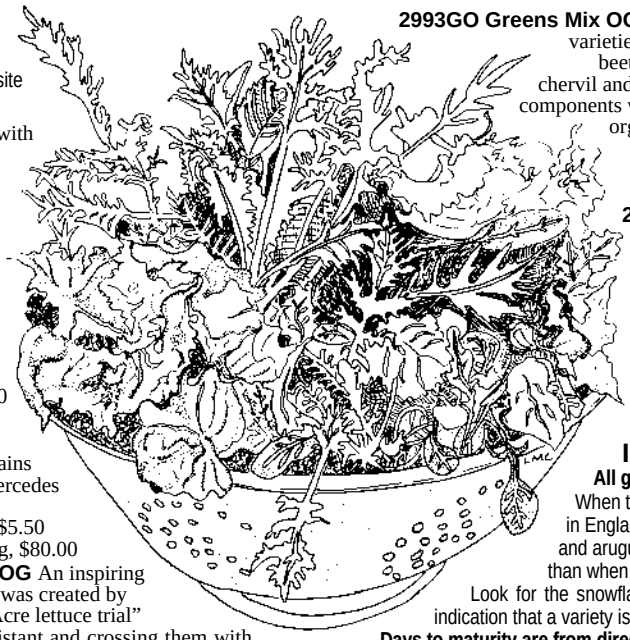
2934TR Trigger (75 days) A car can be a useful tool or, in the wrong hands, a lethal weapon. So can a gun. We test wannabe drivers but not wannabe shooters. Until we have reasonable regulations, some people who shouldn't will continue to pull triggers with regrettable results. For a safe Trigger instead grow this superb Calmar-type iceberg lettuce, which we know has been tested to show high tolerance to cold as well as moderate ability to withstand heat. Trigger grows well in low temperatures and looked good in consecutive years in our trials. Its very crinkly toothed leaves fold into tight, tight hard 7–10" medium-green heads without give. "Excellent yield, superior sweet taste, crispness and texture, marketability and attractiveness," summed up one trialer. Never bitter. None of our lettuce survived the dry inferno of July 2012, but Trigger was right on target until that first July week when it rapidly melted down. Keep plants well-spaced to reduce chances of bottom rot. ❄ ④

A=1g, $1.40 **B**=2g, $2.40 **C**=4g, $4.00
D=14g, $8.00 **E**=28g, $12.00 **K**=112g, $40.00



MIXES

Exact components will vary according to availability but are posted each year on our website **fedcoseeds.com**.



Lettuce Mixes Light up your salad patch with contrasting colors and leaf forms! At least a half-dozen different lettuces, all suitable for cut-and-come-again culture.

2980LM Lettuce Mix
A=1g, $1.20 **B**=2g, $2.20
C=4g, $3.50 **D**=14g, $7.00
E=28g, $12.00 **K**=112g, $36.00

2981LO Lettuce Mix OG A high-quality mix consisting entirely of certified-organic seed. For certified growers and folks wishing to avoid ④ and ⑤ suppliers.
A=1g, $1.40 **B**=2g, $2.50 **C**=4g, $4.20
D=14g, $9.50 **E**=28g, $16.00
K=112g, $55.00

2983DO DeLuxe Lettuce Mix OG Contains those fancy pricey and rare varieties; the Mercedes Benz of lettuce mixes. Now all-organic!
A=1g, $1.70 **B**=2g, $3.20 **C**=4g, $5.50
D=14g, $12.50 **E**=28g, $22.00 **K**=112g, $80.00

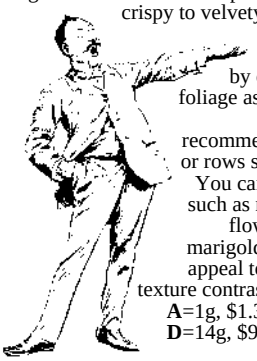
2984FO Freedom Lettuce Gene-Pool OG An inspiring mix with plenty of surprises, this gene pool was created by Morton in what he called the "Hell's Half-Acre lettuce trial" identifying those varieties most disease resistant and crossing them with his best-tasting varieties to select and recombine for excellent traits. At least 10–12 "great looking and great tasting" variations that won raves from trialer Donna Dyrek. Morton invites growers and breeders to work with this mix to create new varieties for their farms or for the general public, while stipulating that nothing derived from it may be patented or protected from others' use in any way. This strategy, originated by software developers, is now known as copyleft (as opposed to traditional copyright). Morton has adopted it to keep his varieties and their derivatives in the public domain as a protected commons. Seeds as nature's software! See gnu.org/philosophy/philosophy.html for more information on copyleft. Copyleft has the potential to return to free use such shared resources as our plant heritage that rightfully belong to all of us. As Morton proclaims, "Adaptive breeding cannot occur under a system of restrictive ownership." OT-certified. ①
A=1g, $2.20 **B**=2g, $4.00 **C**=4g, $7.00 **D**=14g, $20.00
E=28g, $38.00 **K**=112g, $145.00

2985RO Red Carpet Lettuce Mix OG Anyone who has tried Roberta Bailey's mixes knows that they are among the best in the business. She chooses from all the superior organically grown bronze and red varieties that we have in stock. Sure to please, sure to dazzle.
A=1g, $1.60 **B**=2g, $2.80 **C**=4g, $4.50 **D**=14g, $11.00
E=28g, $18.00 **K**=112g, $65.00

2986SM Summer Lettuce Mix A special selection of red, green and bronze lettuce varieties that most years will stand into late July without bolting. Our best-selling lettuce mix.
A=1g, $1.40 **B**=2g, $2.60 **C**=4g, $4.20 **D**=14g, $9.50
E=28g, $17.00 **K**=112g, $60.00

2988WM Winter Lettuce Mix For those who crave fresh salads most of the year, a popular selection of varieties with the potential to survive the winter with protection and resume vigorous growth in the spring. ❄ ②
A=1g, $1.40 **B**=2g, $2.60 **C**=4g, $4.20 **D**=14g, $9.50
E=28g, $17.00 **K**=112g, $60.00

2992ME Mesclun Once an exotic term from Provence meaning 'mixture,' now 'Mesclun' is familiar to us all. According to Rosalind Creasy, the original mesclun used all parts of the tongue, with a range of textures from crispy to velvety and of tastes from tangy to bitter. Our mixture consists of two packets: #**2980** Lettuce Mix and #**2996** Mustard Mix. Harvest these greens by cutting the leaves with scissors, leaving 1–2" of foliage as well as the apical bud and several small leaves surrounding it, so that they can grow back. We recommend that you plant each packet in adjoining beds or rows so that the lettuces won't overwhelm the greens. You can enhance your mesclun by adding other greens such as mâche, claytonia and bronze fennel. Add edible flowers of garlic chives, nasturtiums, violas, signet marigolds, borage and mustard blossoms to lend further appeal to the mix, creating delectable color, taste and texture contrasts.



A=1g, $1.30 **B**=2g, $2.40 **C**=4g, $4.00
D=14g, $9.50 **E**=28g, $16.00 **K**=112g, $55.00

2993GO Greens Mix OG Versatile companion to #**2981**. At least five varieties, certified-organic seed, chosen from among beets, chard, arugula, mustards, orachs, purslane, chervil and kales suitable for mesclun or braising. Exact components will vary according to availability. For a fully organic salad, from seed to table.
A=1g, $1.30 **B**=2g, $2.40
C=4g, $3.60 **D**=14g, $9.00
E=28g, $16.00 **K**=112g, $55.00

2996MM Mustard Mix The same mix found in our #**2992** Mesclun. Includes mizuna, chervil, endives, sorrel, Red Giant mustard, arugula and tatsoi. We may substitute one or two other varieties if necessary.
A=1g, $1.10 **B**=2g, $2.00
C=4g, $3.20 **D**=14g, $7.00
E=28g, $12.00 **K**=112g, $38.00

GREENS

Including Season-extenders

All greens are open-pollinated except where noted.

When to harvest greens? Research from trials conducted in England and Kenya showed looseleaf lettuce, red chard and arugula harvested in the evening had a longer shelf life than when picked in the morning.

Look for the snowflake symbol ❄ after each cultivar description for indication that a variety is hardy through at least a part of our Maine winter.

Days to maturity are from direct seeding.

AMARANTH *Amaranthus* spp.

Amaranth for nutritious leaves and grain see #**4300**. Ornamental Amaranth see #**4831–4837**.

ARUGULA *Eruca sativa*

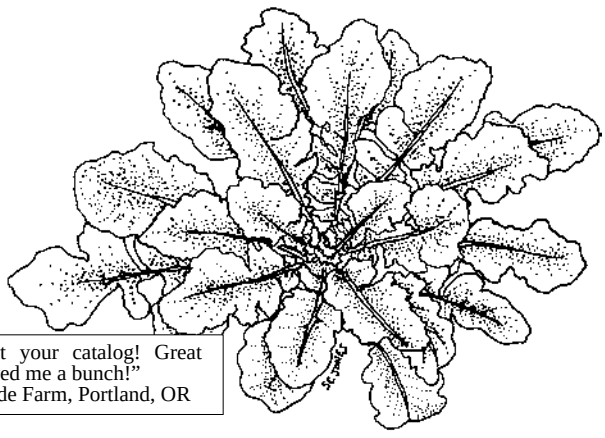
1/16 oz packet sows 60 ft; 1 oz, 960 ft. Also known as Roquette or Rocket. It has come a long way, baby! since 1980 when I added it to our selection because my father liked it. It was little known then, and who would have guessed that 33 years later we'd order it in 50-lb bags and sell more than 600 lb of seed in one season? Commercial growers bought 229 1-lb packets last year plus 49 5-pounders. Few people are indifferent to arugula: most of us love it, a few despise it. Musky green and its piquant blossoms will spice up your salad. Bolts readily in heat, much better as a fall crop or succession planted. Use row covers to discourage flea beetles. I let my spring crop grow to seed and was rewarded with a self-sown September and October patch that is delicious and has no flea beetle damage! A prime ingredient in tangy mesclun mixes. Frequent watering will reduce its pungency.

Ice-Bred Arugula OG (44 days) No crop this year. *Not available in 2014.*

3022AR Arugula (47 days) The best-tasting and most bolt-resistant of the 11 strains we trialed in 2006. Stood outside temperatures down to 14˚ double-covered under Agribon 19. ②
A=1/16oz, 70¢ **B**=1/8oz, $1.20 **C**=1/2oz, $2.00 **D**=1oz, $3.00
E=4oz, $5.00 **K**=1lb, $15.00 **L**=5lb, $70.00

3023AO Arugula OG (47 days) CCOF-certified. ①②③
A=1/16oz, $1.00 **B**=1/8oz, $2.00 **C**=1/2oz, $3.00 **D**=1oz, $4.00
E=4oz, $7.50 **K**=1lb, $25.00 **L**=5lb, $120.00

3027SY Sylvetta Arugula (50 days) *Diplotaxis erucoides* Also known as Rucola Selvatica, a must for extraordinary cold-season salads. A wild form of arugula with very deeply lobed leaves. Slower growing, smaller and more pungent than regular arugula. Although we sometimes have germination difficulty when we direct-seed Sylvetta, we have had great luck with it as a greenhouse potted plant. Only about half the height of regular arugula, it does not require an enormous pot. Moreover, it is more heat tolerant and more cold hardy than regular arugula. Eliot Coleman lists it as one of his winter staples in *The Winter Harvest Handbook* (**9876**). ❄ ②
A=1/16oz, $1.50 **B**=1/8oz, $2.60 **C**=1/2oz, $7.00 **D**=1oz, $13.00
E=4oz, $42.00 **K**=1lb, $155.00

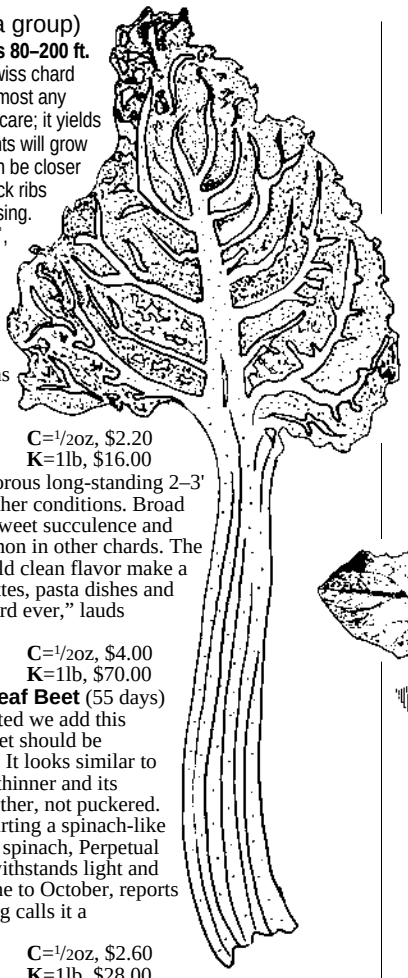


"My Mom was right about your catalog! Great selection and pricing, you saved me a bunch!"
–Aimee Devereaux, Eastside Farm, Portland, OR

CHARD *Beta vulgaris* (cicla group)

1/16 oz packet sows 5–13 ft; 1 oz plants 80–200 ft. Hardy. Salzer's 1915 catalog opines, "Swiss chard produces more food for the table than almost any other vegetable and it also requires less care; it yields a constant crop from July to winter." Plants will grow quite large. Space according to use—can be closer together for baby leaf harvest. Soften thick ribs of chard, beets and other greens by braising.

Minimum germination temperature 40˚, optimum range 50–85˚.



3031FG Fordhook Giant (50 days) Broad white stems, leaves dark green and savoyed with white veins. The standard variety, introduced by Burpee in 1934. Strains of green swiss chard have been around since 1750. ②⑤

A=1/16oz, 80¢ **B**=1/8oz, $1.50 **C**=1/2oz, $2.20 **D**=1oz, $3.30 **E**=4oz, $6.00 **K**=1lb, $16.00

3033AG Argentata (55 days) Vigorous long-standing 2–3' plants tolerate a wide variety of weather conditions. Broad silvery-white midribs with a crispy sweet succulence and none of the oxalic aftertaste so common in other chards. The deep green savoyed leaves with a mild clean flavor make a great substitute for spinach in omelettes, pasta dishes and other casseroles. "Argentata best chard ever," lauds Doreen Mundie of Tryon, NC. ②

A=1/16oz, $1.10 **B**=1/8oz, $2.00 **C**=1/2oz, $4.00 **D**=1oz, $6.00 **E**=4oz, $20.00 **K**=1lb, $70.00

3034PS Perpetual Spinach or **Leaf Beet** (55 days) Thanks to Pam Dawling who suggested we add this member of the chard family. Leaf beet should be cultured like any other chard variety. It looks similar to other swiss chards, but its stems are thinner and its exceptionally tender leaves are smoother, not puckered. It tastes unlike any other chard, imparting a spinach-like flavor that lingers pleasantly. Unlike spinach, Perpetual lasts through summer into fall as it withstands light and moderate frosts. Production from June to October, reports one central Vermont grower. Dawling calls it a "must-grow." ②

A=1/16oz, 90¢ **B**=1/8oz, $1.60 **C**=1/2oz, $2.60 **D**=1oz, $4.80 **E**=4oz, $10.00 **K**=1lb, $28.00

3036BL Bright Lights (56 days) In 1998 Johnny's Selected Seeds won its second AAS for making Swiss chard commercially available in a rainbow of colors. Bright Lights bathes stems, midribs and secondary veins in a panoply of gold, yellow, orange, pink, intermediate pastels and dazzling stripes. The tenderness of its dark green to bronze leaves and the mildness of its chard flavor impressed the AAS judges. Young seedlings respond to cut-and-come-again culture, ideal for mesclun. Developed by John Eaton of Lower Hutt, New Zealand, who found the parent plants, red and yellow, in a small home garden in 1977 and crossed them to standard green and white varieties, selecting for color and flavor over the next fifteen years. Johnny's worked the following years to preserve the strength and range of the individual colors. One of only four items in the catalog whose A-size packet sales exceeded 3,000. Sold more than 5,500 packages, all sizes. "Performed insanely well" for Jason Kafka this year in his high tunnels, and "looks stunning still" on Oct. 16. ③

A=1/16oz, $1.20 **B**=1/8oz, $2.20 **C**=1/2oz, $4.20 **D**=1oz, $6.50 **E**=4oz, $21.00 **K**=1lb, $75.00

3038GO Golden OG (56 days) The gold standard in chard and a first-rate ornamental edible. A rare color in chard, this strain from Frank Morton stood out in our 2007 grow-out. Large light green semi-savoyed leaves contrast with the bright yellow stems and veins. Becomes strikingly luminescent as the plant matures. This heirloom was developed in the 1830s when it was originally known as Chilean beet. All seed is held over. OT-certified. ①

A=1/16oz, $1.30 **B**=1/8oz, $2.50 **C**=1/2oz, $4.80 **D**=1oz, $8.00 **E**=4oz, $26.00 **K**=1lb, $96.00

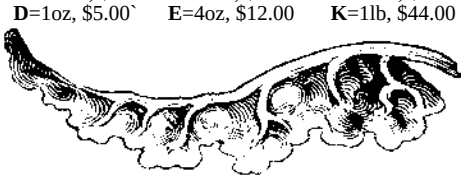
Red Rhubarb (59 days) Deep crimson stalks, dark green leaves. Very hardy. Beautiful for edible landscapes. Heirloom from Europe goes back to 1857. All seed is held over.

3040RR Red Rhubarb ⑤

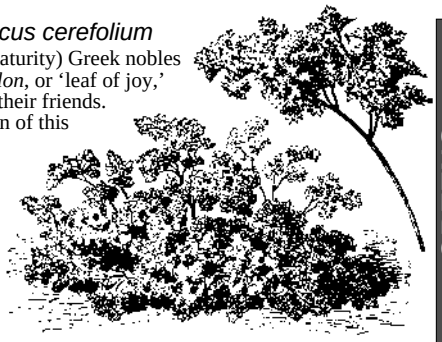
A=1/16oz, 80¢ **B**=1/8oz, $1.40 **C**=1/2oz, $2.20 **D**=1oz, $3.30 **E**=4oz, $6.50 **K**=1lb, $18.00

3041RO Red Rhubarb OG WA-certified. ⑤

A=1/16oz, $1.00 **B**=1/8oz, $1.80 **C**=1/2oz, $2.80 **D**=1oz, $5.00` **E**=4oz, $12.00 **K**=1lb, $44.00



CHERVIL *Anthriscus cerefolium*



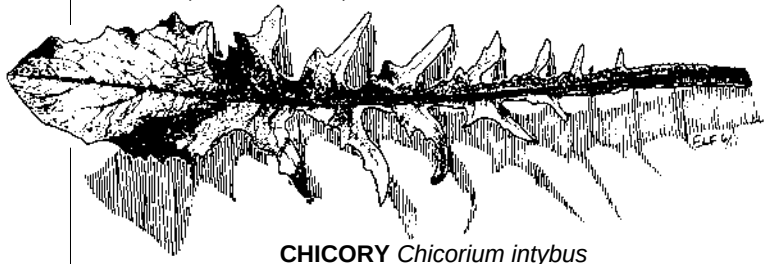
Chervil (60 days to full maturity) Greek nobles referred to it as *khairephyllon*, or 'leaf of joy,' and carried sprigs to bless their friends. Superior slow-bolting strain of this annual grows vigorously. Delicate lacy leaves with distinct flavor good in soups, with fish or asparagus. Essential ingredient in mesclun. Direct seed before a rain in early spring or summer in rich well-drained soil with light but constant moisture. Begin harvesting leaves 6–8 weeks after sowing. In warmer locations performs best as a fall crop.

3044CH Chervil ②

A=1/16oz, 80¢ **B**=1/8oz, $1.40 **C**=1/2oz, $2.20 **D**=1oz, $3.30 **E**=4oz, $6.00 **K**=1lb, $21.00

3045CO Chervil OG BSO, OT-certified. ①

A=1/16oz, $1.10 **B**=1/8oz, $2.00 **C**=1/2oz, $4.50 **D**=1oz, $8.00 **E**=4oz, $20.00 **K**=1lb, $72.00



CHICORY *Chicorium intybus*

3047RI Italiko Rosso (60 days) Savory Italian chicory often mistaken for a red dandelion. Nip off the deeply toothed red-veined leaves for a delectable treat. Ideal for braising, good in spicy mesclun, it imparts its mild dandelion flavor. Moderately tangy in cool weather, it can be somewhat bitter in summer's heat. ②

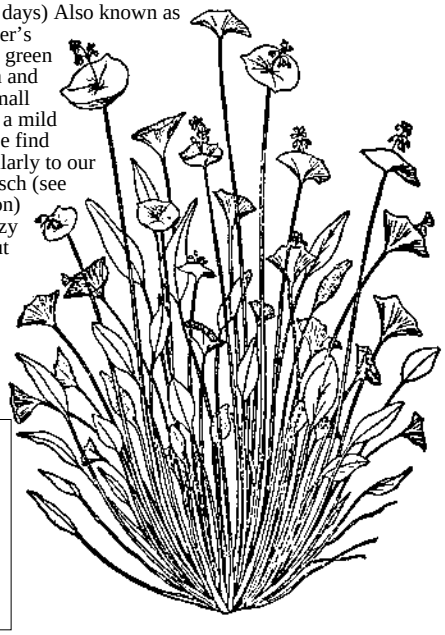
A=0.5g, $1.30 **B**=1g, $2.20 **C**=2g, $3.50 **D**=8g, $6.00 **E**=16g, $9.00 **K**=32g, $13.00

3048PZ Pan di Zucchero (80 days) The name means 'sugar loaf' in Italian. If you associate chicory with bitterness, heirloom Pan di Zucchero will surprise you. Stood out from the four dozen others in chicory expert Lucie Arbuthnot's fields and was delicious in her kitchen. Its 1' tall large tight light-green leaves are shaped like a romaine lettuce crossed with a napa cabbage. High yielding, best as a fall crop. Will store well for three months and survive for four if you wrap it tightly in slightly damp newspaper and keep it just above freezing. Lucie compares it to witloof chicory, but without the extra work. ②

A=0.5g, $1.30 **B**=1g, $2.20 **C**=2g, $4.00 **D**=8g, $6.00 **E**=16g, $10.00 **K**=32g, $16.00

CLAYTONIA *Montia perfoliata*

1/2 g packet sows 3 ft. Direct seed in spring, 24 per ft. Thin to 3" apart. Responds to cut-and-come-again culture and tolerates moderate frosts. For best quality, make at least one succession planting.



3049CL Claytonia (40 days) Also known as Winter Purslane and Miner's Lettuce, it was the '49ers green of choice, rich in calcium and vitamin C. Claytonia's small heart-shaped leaves have a mild but succulent taste that we find attractive. We add it regularly to our mesclun. Barbara Damrosch (see #**9682** in the books section) says it "re-grows like crazy so you can get cut after cut off the same plant." ❄ ③

A=0.5g, $1.50
B=1g, $2.60
C=2g, $4.80
D=8g, $12.00
E=16g, $20.00
K=32g, $32.00

01.08.12

As I walk through the woods in back of the house,
I see so many trees that were shattered by the ice storm,
and yet now, fifteen years later, they still live,
their desire to live pushing them towards the sun.
There's a lot I can learn from that,
although their ability to sprout new limbs
may not be matched anytime soon.

CRESS *Lepidium sativum*

1/16 oz packet sows 50–70 ft; 1 oz, 800–1,000 ft.

3053CC Curly Cress (20 days) Bright green tightly ruffled leaves can be cut as soon as they are a couple of inches tall. Peppery flavor enlivens salads. Offered by C.P. Hirschy for a nickel a packet in 1890. All seed is held over; germs at 95%. ②

A=1/16oz, 70¢ **B**=1/8oz, $1.20
C=1/2oz, $2.00 **D**=1oz, $3.00
E=4oz, $5.00 **K**=1lb, $13.00

3056WO Wrinkled Crinkled Crumpled Cress OG (30 days)

Salad green that will impress.
Mix some lettuce, add some dress.
Stir it up, sit down and fress.
Banish cares and summer stress.

With a designer's eye, a discerning palate, and a breeder's deft touch, Frank Morton crossed Persian and curled cresses to create a gene pool, from which he selected Wrinkled Crinkled. Broad leaves are extremely ruffled and wrinkled along the margins and savoyed in the middle. A fluffy spicy addition to your salad mix, imparting a tang, plus an irresistible sweetness. Can be bunched for market. OT-certified. ①

A=1/16oz, $1.30 **B**=1/8oz, $2.50 **C**=1/2oz, $4.50 **D**=1oz, $8.00
E=4oz, $19.00 **K**=1lb, $70.00

3058WC Watercress (60 days) *Nasturtium officinale* Perennial, Zone 4, native to Europe. Start seeds indoors and transplant to cold frame, keeping watered, or direct sow in soggy stream bank. Also good in pots. Likes sunshine. Keep picked; it gets bitter once flowers form. Use in salads and soups; rich in vitamins and minerals. According to University of Connecticut researchers, contains a compound that inhibits numerous types of cancers. ②

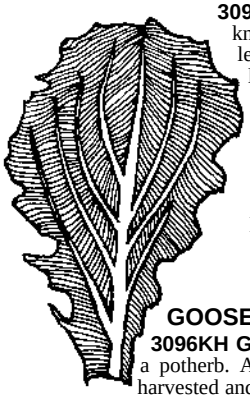
A=1/16oz, $1.50 **B**=1/8oz, $2.60 **C**=1/2oz, $9.00 **D**=1oz, $16.00
E=4oz, $50.00

ENDIVE *Cichorium endivia*

1/16 oz packet sows 40 ft; 1 oz, 650 ft. See also #**6011** Chickendive.

3063FO Très Fine Maraîchère Olesh OG (42 days) Anne Elder reports that TFM has changed her CSA members' minds about whether they like endive. "Wow, an endive that is sweet. Almost unheard of." Large frizzy endive with very fine ribs suitable for late spring and early summer harvests. Holds well in the field. Known to chefs as frisée. 19th-century French heirloom. AGRIOR-certified. ③

A=1/16oz, $2.00 **B**=1/8oz, $3.60 **C**=1/2oz, $13.00 **D**=1oz, $24.00



3092BL Broad-Leaved Batavian (85 days) Also known as Escarole. Smooth broad dark green outer leaves with creamy-yellow closely bunched center leaves which Fearing Burr described as thick and fleshy in his 1863 *Field and Garden Vegetables*. Lauded by William Woys Weaver as a good salad green, not bitter. Especially good as a fall crop; tolerates frost under row cover. Best cooked—the Italian tradition is to braise with white beans. Also makes a savory escarole and leek pie. ②

A=1/16oz, 80¢ **B**=1/8oz, $1.40
C=1/2oz, $2.20 **D**=1oz, $3.50
E=4oz, $7.00 **K**=1lb, $20.00

GOOSEFOOT *Chenopodium bonus-henricus*

3096KH Good King Henry Perennial, Zone 3-9, used as a potherb. Also known as Lincolnshire Spinach. Cultured, harvested and prepared much like asparagus and considered a great delicacy. Gather shoots while they are still tender at about 5" high, peel and boil, or harvest the dark green arrow-shaped leaves like spinach. One of the first greens of spring and one of the last of fall. Prefers rich soil in semi-shady areas, though will grow in full sun. Ancient plant used in festive meals, in meat dishes and as a side dish, was very popular in 16th-century England. Seeds should be stratified: fluctuation of high and low temperatures aids germination. Direct sow in spring or fall or transplant very young seedlings in spring. Once established the plants don't like transplanting. Like asparagus, requires a year of growth before plants can be harvested. If left uncut, stalks grow to 2½'. ②

A=0.5g, $1.30 **B**=1g, $2.20
C=2g, $3.60 **D**=8g, $12.00
E=16g, $22.00

Spring rains
Everywhere that
Water can be,
It deeply is.

"You crazy sonsabitches are awesome! Fedco rules!"
–Michael D. Woliansky, Revolution Summer Farm, Weaverville, NC

SEA KALE *Crambe maritima*

3099SK Sea Kale Perennial, probably Zone 5. Native to the seashores of northern Europe and popular in Victorian England. Once grown on a large scale as a winter substitute for asparagus, cultivated for its blanched tender delicate ivory-colored leaf stalks that can be boiled or steamed to provide a good source of vitamin C. Sea kale grows up to 3' forming a beautiful rosette of wavy-edged thick silvery-grey leaves and dense racemes of small white sweet-scented flowers in midsummer. Plants die back in the winter, the ideal time to take cuttings of the fleshy side-roots to store in moist sand until setting out in soil in March. This is a faster way to generate plants than starting each year from seed. Stratify seeds or nick the big seed casings for better germination. Start indoors like broccoli, set out, protect to overwinter and begin harvesting the 2nd and subsequent years. Blanch the tender slightly bitter early spring shoots in absolute darkness under large pots, and harvest when the stems reach 3–10". Exposed to light in its natural state sea kale is bitter and inedible. After blanching, allow the plants to rebuild their strength for the following season. **BACK!** ③

A=1g, $2.20 **B**=2g, $4.00 **C**=4g, $7.50 **D**=8g, $14.00

MÂCHE *Valerianella locusta*

From Susan Lipari of Alpine, NY: "I grew up in Germany, and mâche was a staple winter salad green...Even here, in upstate NY, Zone 5, it is quite untouched by the cold of winter. I harvest mâche all through the winter, sometimes scraping the snow off the rosettes and blowing on my freezing hands. When the weather begins to warm up in the spring, mâche begins to bolt...In late September...the seeds germinate and begin to grow. By the middle or end of October I can start to harvest the new crop...No Thanksgiving...dinner would be complete in my family without 'Rapunzel' salad." Also known as Corn Salad, Lamb's Lettuce, Field Salad and Fetticus, mâche has a unique nutty flavor. *Note:* Mache seed requires 10–14 days to germinate. Never start in soil temperatures above 68˚ as excessive warmth triggers seed dormancy.

3102VC Verte de Cambrai (45 days) A small-seeded small-leaved strain that performs especially well in cool or cold conditions and is the best kind for overwintering. Susan Coombs of Newton, MA, reported it happily growing in her garden in February. May be the same variety Thomas Jefferson grew in 1810 under the name Candia. All seed is held over; germinated at 88%. ❄ ②

A=1/16oz, $1.00 **B**=1/8oz, $1.80 **C**=1/2oz, $3.00 **D**=1oz, $5.00
E=4oz, $14.00 **K**=1lb, $40.00

3114LL Large-Leaf Round (60 days) Vigorous large-leaf type is suitable for sowing in spring for an early summer harvest. Weaver traces this strain back to the 1840s, but for centuries prior to that corn salad was gathered in the wild. ②

A=1/16oz, $1.00 **B**=1/8oz, $1.80 **C**=1/2oz, $2.60
D=1oz, $4.00 **E**=4oz, $9.00 **K**=1lb, $28.00

MINUTINA *Plantago coronopus*

3122MN Minutina (50 days) Also called Buckshorn Plantain. "Good in a buttered frying pan with fresh snipped chives and a fresh duck egg cracked on top," informs Jan Sonstrom. Morse Pitts of Windfall Farm brought this spiky green to our attention. As it comes up it looks like little blades of grass. As it matures, it resembles mizuna leaves, only much narrower, less leafy and more succulent. Crunchy with a mild nutty flavor. Slow grower, will regenerate from cutting, but we recommend succession planting. Extremely cold hardy. ❄ ③

A=1/16oz, $1.30 **B**=1/8oz, $2.40 **C**=1/2oz, $7.50 **D**=1oz, $14.00
E=4oz, $40.00

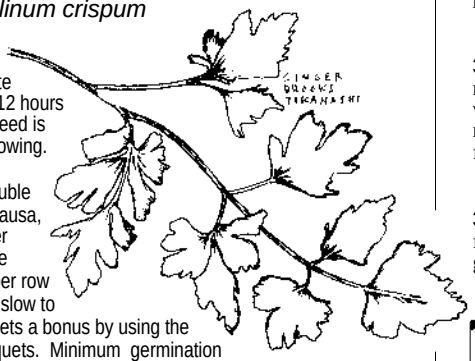
ORACH *Atriplex hortensis*

Key salad ingredient once called the Cabbage of Love, also known as Mountain Spinach, thrives in cool weather and should be sown as soon as the ground can be worked. Can be pinched back to encourage production and retard bolting. Produces an abundance of seed that can be saved, and will occasionally self-sow. Orach has been eaten since the dawn of civilization. Once very popular in America—Fearing Burr listed 16 varieties in 1865!—then forgotten for many years, orach has made a mild comeback.

3148RO Purple Orach OG (38 days) Beautiful red-purple spinach-shaped leaves have a mild flavor. Seed has bracts. Biodynamically grown but not BD certified. OT-certified. ①
A=1/16oz, $1.40 **B**=1/8oz, $2.50 **C**=1/2oz, $7.00 **D**=1oz, $12.00
E=4oz, $36.00

3150AO Aurora Orach Mix OG (38 days) In his Wild Garden Seed catalog, originator Frank Morton calls it "mountain spinach for merry pranksters." This mix of golden, dark purple, purple and carmine day-glo will give orach a whole new aura in your garden and salad mixes. As Morton says, "Exotic forms and high-contrast high-intensity color sells seed, and good taste and easy culture sells that seed year after year." Seed has bracts. MT-certified. ①
A=1/16oz, $1.40 **B**=1/8oz, $2.50 **C**=1/2oz, $7.00 **D**=1oz, $12.00
E=4oz, $36.00

PARSLEY *Petroselinum crispum*



1/16 oz packet sows 25 ft; 1 oz, 400 ft. 14,000 seed/oz average. Very hardy. Very slow to germinate (up to 30 days). Soaking seed 8–12 hours will hasten germination. Parsley seed is short-lived; test old seed before sowing.

A shining star of Jason Kafka's wholesale program. He grows Double Curled, Dark Green Italian and Krausa, moves a few hundred bunches per week and says that if you have the market, these may bring more $ per row foot than any other crop. All were slow to bolt this year. When they do, he gets a bonus by using the umbels as filler for flower bouquets. Minimum germination temperature 40˚, optimal range 50-80˚, optimal temperature 70˚, emergence takes 29 days at 50˚, 17 days at 59˚, 13 days at 77˚.

3158GI Gigante d'Italia (70 days) We were wowed by its early seedling vigor and rich sweet flavor. Flat-leaved heirloom hails from northern Italy and grows to 1'. ❄ ③
A=1/16oz, 70¢ **B**=1/8oz, $1.20 **C**=1/2oz, $2.20 **D**=1oz, $3.20
E=4oz, $5.00 **K**=1lb, $14.00

3166FG Double Curled (75 days) This is the same cultivar we've been offering as Forest Green, but true Forest Green is triple curled and this strain is not. Instead it's double-curled with long upright stiff stems. Holds color well all season, tolerates heat and repeated cuttings. Gene and Joanna plant huge amounts for parsley pesto. ❄ ②
A=1/16oz, 80¢ **B**=1/8oz, $1.30 **C**=1/2oz, $2.40 **D**=1oz, $3.50
E=4oz, $7.00 **K**=1lb, $22.00

3168KR Krausa (75 days) The plaudits roll in. "Krausa parsley, big winner here, didn't bolt from last February seeding, unlike any other parsley varieties, very prolific and most winter hardy," reported Bryan O'Hara in CT. Across the country, Evelyn Durand of Marysville, CA, agreed, "Krausa is still growing strong in the greenhouse, almost a year now. It hardly ever puts out a seed stalk! Stays at top quality summer and winter. Great flavor, too!" Stems so sweet they taste almost like a miniature celery: thick, solid, crunchy, yummy. Dense triple-curled medium-green parsley holds its color without developing white or brown spots. Taller, thicker stems than Double Curled. "Never before had a parsley with such delicious stems," raves trialer Donna Dyrek. Can stand the heat and were still beautiful and juicy in October. ❄ ④
A=1/16oz, $1.30 **B**=1/8oz, $2.20 **C**=1/2oz, $3.60 **D**=1oz, $6.50
E=4oz, $19.00 **K**=1lb, $72.00

3170DO Dark Green Italian OG (78 days) Smooth and shiny large wide dark green flat leaves. Upright with vigorous growth. WA-certified. ❄ ⑤
A=1/16oz, $1.20 **B**=1/8oz, $2.00 **C**=1/2oz, $3.60 **D**=1oz, $7.00
E=4oz, $18.00 **K**=1lb, $66.00

PURSLANE *Portulaca oleracea* var. *sativa*

Its Latin name means 'milk-bearing vegetable.' Direct seed in spring, after danger of frost is past. Thin to 5" apart. Can be cut; will regenerate. We recommend a succession planting to maximize tenderness. Purslane leaves have more vitamin C than spinach leaves and are rich in omega-3 fatty acids and antioxidants.

3182GO Golden OG (50 days) Its wild relative, the common garden weed, was a favorite edible of both Thoreau and Gandhi. This domesticated strain is more erect than the wilding, and not crawly. Golden has a succulent texture with a mildly acerbic flavor that makes it an ideal addition to mesclun. Golden-green leaves patterned like a cross. OT-certified. ①
A=0.5g, $1.40 **B**=1g, $2.50 **C**=2g, $4.50 **D**=8g, $9.00
E=16g, $16.00 **K**=32g, $30.00

RADICCHIO *Cichorium intybus*

These radicchios are easy to raise from transplants although they have not yet been refined to absolute uniformity. Occasional plants still bolt unpredictably. If you try direct-seeding, watch out for voracious flea beetles. Culture like lettuce; do not allow to dry out. They are mature when heads form in the center. Do not eat the bitter outer leaves. The edible centers are an acquired taste, retaining some bitterness, wonderful in salad or braised. Fall crops make the largest heads. Very tolerant of fall frosts. Ours gallantly stood consecutive nights in the low twenties without apparent damage. Even if you don't like to eat radicchio, consider growing its red heads as ornamentals. Left in the ground over winter, it bolts in spring and blooms with cornflower-blue chicory flowers every morning throughout the summer.

Seed not pelleted.

3187FR Fiero (66 days) F-1 hybrid. A beautiful elongated upright radicchio. Deeply ribbed leaves with a branching pattern off the central vein reminiscent of a tree. The whitish vein blushes green along the margins and branches, creating a spectacular color contrast with the purplish background. Early and delicious, a reliable header. ④
A=0.05g, $1.70 **B**=0.1g, $3.20 **C**=0.2g, $6.00 **D**=0.4g, $11.00
E=1.6g, $22.00 **K**=3.2g, $42.00

3188ND Indigo (69 days) F-1 hybrid. We've never seen a radicchio produce such consistently large tight heads of extraordinary rich interior color. Nikos rated it one of the sweetest red radicchios she's ever tasted. TB resistant. ④
A=0.05g, $1.70 **B**=0.1g, $3.20 **C**=0.2g, $6.00 **D**=0.4g, $11.00
E=1.6g, $22.00 **K**=3.2g, $42.00

3189RT Radicchio di Treviso (80 days) Shaped almost like a small romaine lettuce, turns from green to variegated dark burgundy with lovely white veining as the nights grow cold. As its narrow leaves bunch like a romaine, you can bind them with a ribbon to make a firmer "head." Best for fall crops. ②
A=0.5g, $1.30 **B**=1g, $2.20 **C**=2g, $4.00 **D**=8g, $7.00
E=16g, $12.00 **K**=32g, $20.00

3190PR Palla di Fuoco Rossa (85 days) Round-headed Chioggia-type from Italy. Palla di Fuoco impressed us with its deep burgundy heads with good uniformity. Its name means 'ball of red fire.' ②
A=0.5g, $1.30 **B**=1g, $2.20 **C**=2g, $4.00 **D**=8g, $7.00
E=16g, $12.00 **K**=32g, $20.00

❄ Season-Extending Greens ❄

Greens marked with ❄ at the end of their descriptions are hardy through at least a portion of our winters in Zones 4 and 5, and probably with protection can survive the entire winter in Zone 6 and south. We continue our trials to add to this selection.

Spinach
2510 Space
2512 Olympia
2536 Donkey
2540-1 Bloomsdale
2550 Tyee
2555 Giant Winter
2558 Winter Bloomsdale

Lettuce
2781 Merlox Red Oak
2786 Red-Tinged Winter
2788 Oscarde
2791 Tango
2814 North Pole
2816 Winter Marvel
2849 Winter Density
2865 Rouge d'Hiver
2886 Winter Wonderland
2934 Trigger
2988 Winter Lettuce Mix

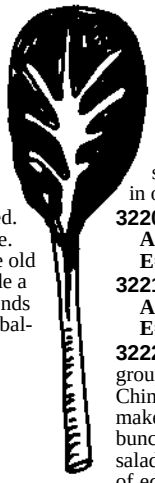
Mustard
3234 Pink Lettucy Gene Pool
3235 Green Wave
3236 Red Giant

Kale
3450 Beedy's Camden
3452 Redbor
3453 Winterbor
3457 Rainbow Lacinato
3461-2 Red Russian
3464 White Russian

Assorted
2392 Gilfeather Turnip greens
3027 Sylvetta Arugula
3049 Claytonia
3102 Verte de Cambrai Mache
3122 Minutina
3158 Gigante d'Italia Parsley
3166 Double Curled Parsley
3168 Krausa Parsley
3170 Dark Green Italian Parsley
3204 Green Lance
3218 Senposai
3220-1 Tatsoi
3222 Tokyo Bekana
3391 Deadon Savoy Cabbage
3397 Wirosa Savoy Cabbage
3441 Champion Collards
3471 Kolibri Kohlrabi

SORREL *Rumex acetosa*

Sorrel derives from the French word *surele*, roughly translated 'to sour.' Sorrel juice has been employed to bleach linens and polish silver.



3192BL Broad-Leaved Sorrel (60 days) Perennial, Zone 3. Often known as Sour Grass. Likes cool weather, acid soil, partial shade and plenty of water to retard bolting. In spring it rapidly shoots up its thick sword-shaped lemony-flavored leaves. If left untouched will grow up to 18" and make seed stalks. Snip the leaves while they are still young and tender. Keep cutting and never let them grow big and coarse or go to seed. If they get away, mow the plant close to the ground and it will regenerate. Or treat as a biennial by planting a new patch every year and rotating the old out of production. Young leaves add tang to soups and salads and provide a welcome spring tonic. Tony Ricci of Green Heron Farm in PA recommends grilling fish wrapped in sorrel leaves surrounded by foil to impart an herbal-lemon flavor to the fish. ②

A=1/16oz, $1.10 **B**=1/8oz, $1.90 **C**=1/2oz, $3.00 **D**=1oz, $5.50
E=4oz, $13.00 **K**=1lb, $50.00

ASIAN GREENS *Brassica* spp.

All Asian greens are open-pollinated except where noted.

ASSORTED

3203GS Garland Serrated Chrysanthemum *C. coronarium* (40 days) Grown for its aromatic greens with an unusual taste appreciated by devotees. This strain was superior to other Shungiku varieties in our trial. Its 5" flowers (buttercup yellow, edged in white with serrated tips) were larger and better for the edible flower market and its small grey-green serrated leaves had distinctly more chrysanthemum taste. The Japanese use it in hearty one-pot winter stews known as *oden*. Also good in salads, soups and stir-fries. Plant thickly in early spring (or summer for a fall crop) and harvest green leaves when stems are 4–8" tall, before buds appear. ⑤

A=1/16oz, $1.10 **B**=1/8oz, $2.10 **C**=1/2oz, $3.60 **D**=1oz, $5.50
E=4oz, $16.00 **K**=1lb, $58.00

3204GL Green Lance (45-60 days) *B. oleracea* F-1 hybrid. While Lance's name seems more out of Final Fantasy or other such games, it has a number of aliases that more properly tie it to the Asian vegetable kingdom: Chinese Broccoli, Chinese Kale, Kailaan or Gai Lan. Grown for its succulent stalks and leaves, it sends up tender 8" shoots topped with elegant little loose florettes. Once the main stalk is cut, it coppices into many secondary shoots. Has versatility and flavor similar to broccoli, excellent steamed or in stir-fries. Heat and cold tolerant, thrives in a wide range of climates and can be planted in late spring, late summer or early fall. ❄ ⑤

A=2g, $1.80 **B**=4g, $3.40 **C**=14g, $9.50 **D**=28g, $16.00
E=112g, $52.00 **K**=448g, $190.00

3205HT Hon Tsai Tai (37 days) *B. rapa* Chinese specialty vegetable also known as Purple-flowered *Choy Sum*, meaning 'vegetable heart' or 'flowering stem' in Cantonese. The flower stalks, leaf stalks and buds are deep purple, with color intensifying in cold weather. Grows vigorously in fertile soil, producing up to forty pencil-thick flowering shoots, though much skimpier on poor ground. Shoots and leaves have a pleasant mild mustardy flavor good for stir-fries, braising and soups. Grows best in cool weather, ideal when sown in late summer for a fall crop or in fall for an early winter crop in warmer climates. Hardy to 23˚. May bolt prematurely in midsummer heat. ③

A=1/16oz, $1.10 **B**=1/8oz, $2.00 **C**=1/2oz, $3.30 **D**=1oz, $5.00
E=4oz, $14.00 **K**=1lb, $44.00

3209MS Maruba Santoh (35 days) *B. r.* (pekinensis group) With Maruba you get four vegetables in one. The loose round vibrant chartreuse leaves provide a mild piquant mustardy flavor while the flat white stems impart a juicy crisp pac choy taste. High-end chefs like to use the blossoms. Market grower Scott Howell finds the flavor more subtle and complex than that of other greens and cuts Maruba small for his mesclun. Fairly bolt tolerant, so plant after the early spring flea beetle invasion subsides. ⑤

A=1/16oz, $1.10 **B**=1/8oz, $2.00 **C**=1/2oz, $3.30 **D**=1oz, $5.00
E=4oz, $14.00 **K**=1lb, $44.00

3218SP Senposai (40 days) F-1 hybrid. This exciting green, developed in Japan, is a cross between Japanese Mustard Spinach (Komatsuna *B. rapa*) and regular cabbage. Round medium-green leaves are wonderful in *okonamiyaki* or for braising. A spring sowing will stand the entire summer (even through drought) and well into fall before bolting. Can be overwintered in warmer climes or used for spring greenhouse salad production because it grows so rapidly. In Michigan Anne Elder picked it through the snow on Christmas day. Open plant habit requires 12–18" spacing. ❄ ⑤

A=1/16oz, $1.30 **B**=1/8oz, $2.40
C=1/2oz, $4.20 **D**=1oz, $8.00
E=4oz, $22.00 **K**=1lb, $77.00

Tatsoi (45 days) *B. r.* (narinosa group) What grows quickly, can be seeded as late as August and withstands frost? Yes, Tatsoi, also known as Tah Tsai. Anne Elder picked it all fall into December even after a snow melt. In winter it was still not burnt by cold and remained sweet. "A dream come true for snow-dwelling beings craving greens." Survived Roberta's overwintering trial. Spoon-shaped thick dark green leaves make beautiful compact rosettes with mild brassica flavor. Good stir-fried and in soups. Will come back when cut. An essential ingredient in our salads and mesclun. ❄

3220TS Tatsoi ②⑤

A=1/16oz, $1.10 **B**=1/8oz, $2.00 **C**=1/2oz, $3.50 **D**=1oz, $5.00
E=4oz, $12.00 **K**=1lb, $40.00 **L**=5lb, $190.00

3221TO Tatsoi OG OT-certified. ①

A=1/16oz, $1.40 **B**=1/8oz, $2.60 **C**=1/2oz, $4.50 **D**=1oz, $8.00
E=4oz, $24.00 **K**=1lb, $90.00

3222TB Tokyo Bekana (20 days baby, 45 days full size) *B. r.* (chinensis group) Adam Tomash says, "Tokyo Bekana is as close to lettuce as any Chinese cabbage I have ever tasted." Its pale green color and lettucy leaves make it look almost like lettuce. These baby Chinese cabbages may be bunched for market or the ruffled curled leaves cut to add loft and weight to salad mixes. It will regrow for multiple cuttings and branch out, giving lots of edible leaves with very little coarse stalk. Lacy and mild, sweet a bit like lettuce but never bitter and makes a good slaw. "I love to graze on it and have put it in my Sandor Katz–style kimchi," said Tomash. Quite cold hardy (to 15˚), so good for fall crops. Tomash seeded his on July 6 for a late Aug–Sept harvest, but it could be sowed later and, with protection, produce well into late fall. Thin to 4–6" for full "heads." ❄ ⑤

A=1/16oz, $1.10 **B**=1/8oz, $2.00 **C**=1/2oz, $5.00 **D**=1oz, $8.00
E=4oz, $18.00 **K**=1lb, $45.00

3223YN Yokatta-Na (21 days baby; 45 days mature) *B. r.* (narinosa group) F-1 hybrid. "What a surprise! The heads grow well larger than a foot tall and the young or 2nd growth heads we ate whole like young bok choy. Neighbors asked us to bring more over…notable because Asian greens aren't exactly standard fare around here. Held unbelievably long through the hot days and damp summer, not shooting seed till early December after over two months of frost, a huge snowstorm and temperatures in the mid-teens," reported the Wolperts in Belington, WV. Quick-growing and versatile, tolerating both heat and cold, it can extend your season at either end, while simultaneously broadening your culinary range. Use it either raw in salad mixes or cooked in stir-fries. The deep green tender leaves, though flavorful, lack the mustard "bite" found in so many Asian greens and can be harvested as a cut-and-come-again crop or at maturity. "I am in love with it—best new green I've had in ages!" summed Diana Kushner of Arcadian Fields, Hope Valley, RI. ④

A=1/16oz, $1.40 **B**=1/8oz, $2.60 **C**=1/2oz, $4.50 **D**=1oz, $8.00
E=4oz, $26.00

CHINESE CABBAGE *B. rapa* (pekinensis group)

1/16 oz packet sows 25 ft, approx 9,500 seeds per oz. See also #**3222** Tokyo Bekana for a lettucy-type baby Chinese cabbage.

3224FJ Fun Jen (45 days) A good lettucy-type Chinese cabbage featuring fast-growing undulating leaves with a slightly wrinkly surface. Semi-loose conical very light yellow-green ruffled 6x10" heads of crunchy texture and very mild delicate flavor somewhat like lettuce. The thick white ribs are tasty with a pleasing light tangy sweetness. Excellent frost resistance but will bolt in heat after standing 2–4 weeks. Stores very well. Seed from Known-You in Taiwan. ③

A=1/16oz, $1.10 **B**=1/8oz, $2.00 **C**=1/2oz, $3.50 **D**=1oz, $5.00
E=4oz, $12.00 **K**=1lb, $38.00

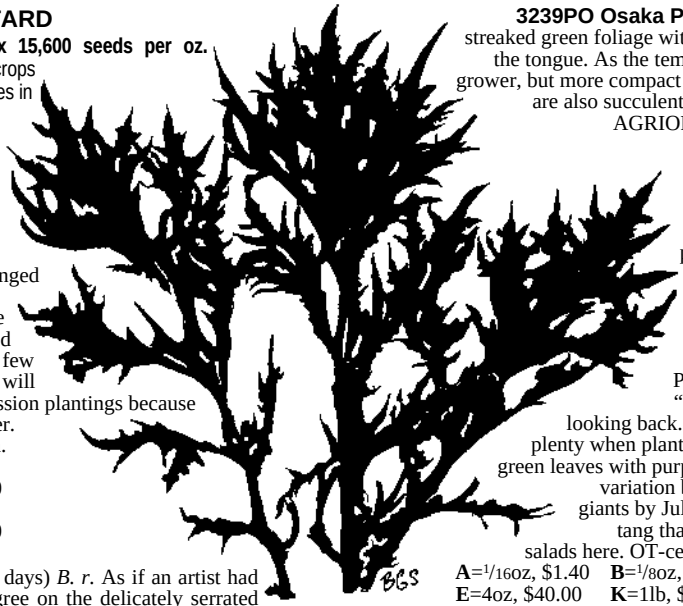
3225BL Blues (52 days) F-1 hybrid. Good bolt resistance, disease resistance and taste in this napa type. Flavor is relatively pungent. Suitable for planting early spring through July. Moderate tolerance to virus, DM, ALTS, BSR. ⑤

A=1/16oz, $2.30 **B**=1/8oz, $4.20 **C**=1/2oz, $16.00 **D**=1oz, $30.00
E=4oz, $110.00

"Great selection, company philosophy and prices. I will spread the word again and again!"
–Francis Laper, Romulus, NY

MUSTARD

1/16 oz packet sows 40 ft, approx 15,600 seeds per oz. Incorporating the residues of mustard crops into your soil can reduce fungal diseases in your succession crop. Mustards are potent soil fumigants.

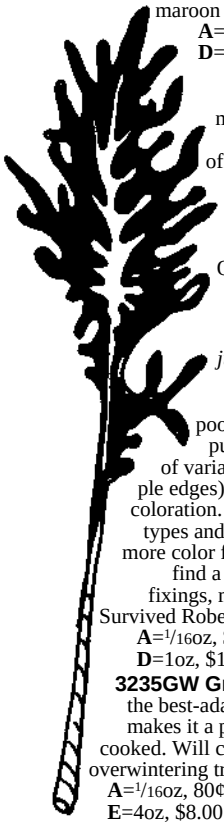


3228MO Early Mizuna OG (40 days) *B. r.* (japonica group) Recommended for northland salad enthusiasts, this vigorous heirloom Japanese mustard produces slender white stalks with deeply cut and fringed dark green leaves, not at all pungent. One planting could suffice for full-season production if watered in dry spells and kept cut, though a few will bolt in September. Many folks will prefer to make three or more succession plantings because the young leaves are the most tender. Biennial. Essential in mild mesclun. MCCO, VOF-certified. ③⑤

A=1/16oz, $1.10 **B**=1/8oz, $2.00 **C**=1/2oz, $3.50 **D**=1oz, $5.00 **E**=4oz, $16.00 **K**=1lb, $48.00 **L**=5lb, $230.00

3229RO Ruby Streaks OG (40 days) *B. r.* As if an artist had carefully brushed deep purple filigree on the delicately serrated leaves of mizuna. Clayton Carter calls it "everything that the so-called Purple Mizuna should be." Bold coloring on deeply toothed leaves. Germinates quickly, grows speedily but, unlike Mizuna, bolts rapidly. Great for multiple spring and fall cuttings, but cannot stand heat. Provides a striking contrast when bunched either with #**3228** Mizuna, #**3222** Tokyo Bekana or #**3209** Maruba Santoh. Also unlike Mizuna, has a sweet and spicy flavor, though not excessively hot. Even after it bolts, its flower buds and yellow flowers can add a tang to salads. Carter calls it "the staple of my salad and braising mixes." "A big hit with my chef clients," reports Georgie Smith of Coupeville, WA. Color deepens toward darker maroon in the cool of autumn. WA-certified. ①

A=1/16oz, $1.50 **B**=1/8oz, $2.60 **C**=1/2oz, $5.40 **D**=1oz, $8.50 **E**=4oz, $27.00 **K**=1lb, $105.00



3230MO Mizspoona Salad Selects Gene Pool OG (40 days) *B. r.* Nikos had never seen me eat that much of any green before! This mix of saladings must have hit my palate just right…didn't bite my tongue off like some of the serious mustards, nor bore me with blandness. Sweet, juicy with a bit of zing, medium-dark green variable leaves, some rounded, some pointed, slightly ribbed white veins. Tender and delicious in salads or braised. From Frank Morton. OT-certified. ①

A=1/16oz, $1.50 **B**=1/8oz, $2.60 **C**=1/2oz, $6.50 **D**=1oz, $12.00 **E**=4oz, $40.00 **K**=1lb, $125.00

Pung Pop Mustard Gene Pool OG (40 days) *B. juncea* Dropped for slow sales. *Not available in 2014.*

3234LO Pink Lettucy Mustard Gene Pool OG (40 days) *B. r.* Morton selected well-mixed breeding pools for disease resistance and particularly for pink and purple pigmentations on the midribs. There is still a lot of variation in leaf color (from light green to green with purple edges), in indentations of the leaf edges and some in midrib coloration. Morton continues to select from the pool for specific types and you can, too. He is particularly interested in creating more color for baby cut salad mixes. Commercial operations will find a wealth of good cutting, home gardeners terrific salad fixings, mild but with just enough tang to keep you interested. Survived Roberta's overwinter trial. OT-certified. ❄ ①

A=1/16oz, $1.50 **B**=1/8oz, $2.60 **C**=1/2oz, $7.00 **D**=1oz, $12.50 **E**=4oz, $42.00 **K**=1lb, $130.00

3235GW Green Wave (45 days) *B. j.* This 1957 AAS winner is the best-adapted mustard for our climate. Its hot mustardy flavor makes it a prime ingredient in piquant mesclun. Not as hot when cooked. Will come back when cut; slow to bolt. Survived Roberta's overwintering trial. ❄ ②③

A=1/16oz, 80¢ **B**=1/8oz, $1.40 **C**=1/2oz, $2.20 **D**=1oz, $4.00 **E**=4oz, $8.00 **K**=1lb, $28.00

3236RO Red Giant OG (45 days) *B. j.* (integlifolia group) Large purple-tinted savoyed leaves make the 18" plants very decorative. Color intensifies in cooler temperatures. Gene compares their taste to horseradish. I call it peppery. It is less hot during cool weather. This heirloom Japanese mustard is a standard ingredient in spicy mesclun. Survived outdoor temperatures down to 18˚ when double-covered with Agribon 19. CCOF-certified. ❄ ③

A=1/16oz, $1.20 **B**=1/8oz, $2.20 **C**=1/2oz, $3.80 **D**=1oz, $5.60 **E**=4oz, $16.00 **K**=1lb, $56.00

3239PO Osaka Purple OG (45 days) *B. j.* Striking large purple-streaked green foliage with a zesty flavor that leaves a lingering tingle on the tongue. As the temperatures grow hotter, so do the leaves. A rapid grower, but more compact than Red Giant, mature at 12–14". Broad stems are also succulent. Used like Red Giant for mesclun and braising. AGRIOR-certified. ③

A=1/16oz, $1.30 **B**=1/8oz, $2.40 **C**=1/2oz, $4.00 **D**=1oz, $7.50 **E**=4oz, $20.00 **K**=1lb, $75.00

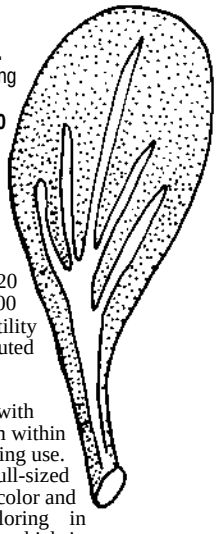
3246PO Purple Rapa Mix Gene Pool OG (45 days) Another of Morton's distinctive gene pools, Purple Rapa Mix is a select population of breeding material from crossing Pink Lettucy and Wong Bok with Scarlet Ohno. In his Wild Garden Seed catalog, Morton advertises it as "huge seeds for big competitive seedlings." Competitive? That is an understatement. As President Kennedy would have said, this one has "vigah," racing out of the starting gate and never looking back. Morton says best color in winter, but it showed plenty when planted April 18, nice tall frilly medium-hot serrated green leaves with purple veins and shading, with plenty of interesting variation between plants. Refusing to bolt, they grew into giants by July 4, sporting juicy midribs with an invigorating tang that gained heat as the weather did. Plenty of great salads here. OT-certified. ① **NEW!**

A=1/16oz, $1.40 **B**=1/8oz, $2.50 **C**=1/2oz, $6.50 **D**=1oz, $12.00 **E**=4oz, $40.00 **K**=1lb, $130.00

3253ZO Toraziroh OG (45 days) *B. alboglabra* A robust performer with just the right kind of mustardy bite. Rapidly develops prolific yields of very dark green large leaves distinctively but not overwhelmingly pungent. In two years of trials won many favorable reviews from brassica lovers. Stems, also edible, have a flavor somewhat like pac choy. Relatively slow to bolt. OT-certified. ①

A=1/16oz, $1.40 **B**=1/8oz, $2.50 **C**=1/2oz, $5.20 **D**=1oz, $8.00 **E**=4oz, $25.00

PAC CHOY *B. r.* (chinensis group)



1/16 oz packet sows 30 ft, approx 12,500 seeds per oz. Also known as Bok Choy. Pac choy and carrots are among the best sources of beta carotene. We trialed baby pac choy in 2011 and found that our present selections #**3260** and #**3264** are as good as any.

3260SH Shuko (45 days) F-1 hybrid. Baby pac choy with green stems likes cool temperatures but resists bolting for a long time, even in heat. Vase-shaped plants have broad green petioles with beautiful dark leaves. 6–12". ⑤

A=1/16oz, $1.30 **B**=1/8oz, $2.40 **C**=1/2oz, $4.20 **D**=1oz, $8.00 **E**=4oz, $21.00 **K**=1lb, $70.00

3264PP Purple (48 days) F-1 hybrid. Adds versatility to mixes and salad. This new color in pac choy debuted in many 2009 seed catalogs. My favorite of several strains in the trial, showed the most vigorous early growth and darkest hue. Purple top leaves contrast with green veins and stems. Quick growers; harvest them within three weeks as 4–6" baby-leaf greens, their best spring use. For fall crops you may allow them to grow 8–10" full-sized heads. Along the way they lose some of their deep color and mature to a greenish purple. The purple coloring in vegetables such as this comes from anthocyanins, which improve memory and cell health. Four years in the catalog; sales have increased each year. ③

A=1g, $2.80 **B**=2g, $5.00 **C**=4g, $9.50 **D**=14g, $26.00 **E**=28g, $50.00

3270PO Prize Choy OG (50 days) Classy pac choy with celery-like white stems and vase-shaped 15–18" tall heads, like two vegetables in one with succulent stems and tender greens. Good for kimchi or stir-fries. WA-certified. ①

A=1/16oz, $1.50 **B**=1/8oz, $2.50 **C**=1/2oz, $6.50 **D**=1oz, $12.00 **E**=4oz, $40.00 **K**=1lb, $115.00

3273JC Joi Choi (50 days) F-1 hybrid. Why did we offer yet another pac choy, an F-1 hybrid at that, when we already had the wonderful Prize Choy? Because Joi Choi is different. Its leaves are much darker green than Prize Choy's, it is more uniform, a quality valued by market growers, and above all, its basal stem is almost double the thickness of Prize Choy's. Trialer Adam Tomash prefers it to all other varieties because that basal thickness makes Joi so succulent. Suitable both for summer and fall crops, though much less likely to bolt in the fall. Do not disturb the roots when transplanting and space 1' apart. ⑤

A=1g, $1.80 **B**=2g, $3.30 **C**=4g, $6.00 **D**=14g, $16.00 **E**=28g, $30.00

Our Mailing List

We never sell our mailing list. If we are sending you too many catalogs, let us know so we can save both trees and money.

BRASSICA

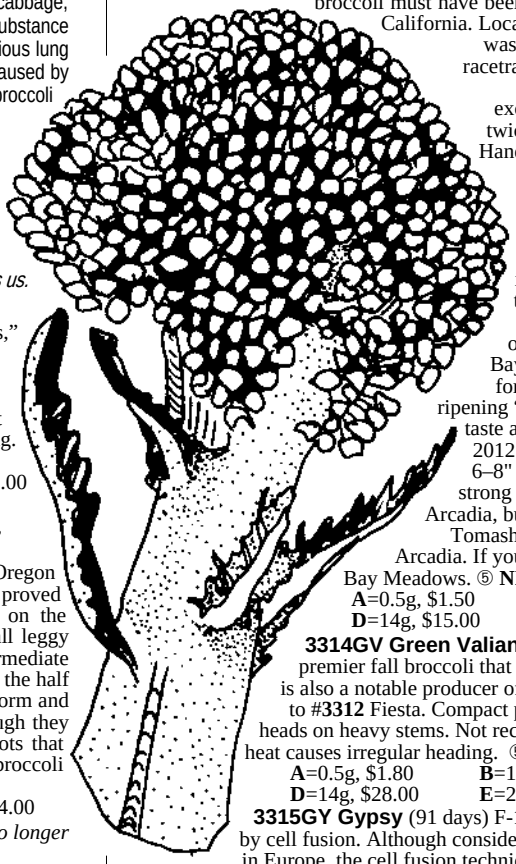
2 gram packet sows 45 ft. Average about 7,500 seeds per oz with significant variation between the different vegetables. See the planting chart on page 81 for details. Hardy. Require warm temperatures to germinate, but need 60s during seedling stage for optimal growth; higher temperatures make seedlings leggy. Heavy feeders; for best growth, need regular moisture and 2–3' spacing. Have done well for us succeeding onions and garlic in beds. Cauliflower and broccoli are damaged by hard frosts, especially in spring. **Days to maturity are from direct seeding.** Subtract 20 days from date of transplanting.

BROCCOLI *B. oleracea* (botrytis group)

Start broccoli indoors March–May for setting out May–July, or direct-seed in May or June for fall crop. Easier as a fall crop because some varieties perform poorly in hot summers. For better stands in dry conditions sow in trenches. Broccoli dislikes extreme temperature and moisture fluctuations of the kind we have endured the past three seasons. Climate change is making it a challenge to grow even the more heat-tolerant varieties in the summer, while at the same time lengthening and making more temperate our New England falls, broadening growers' windows of opportunity.

How tastes change! In 1880, Hiram Sibley & Co. offered 37 varieties of cabbage, just 3 of broccoli. Broccoli contains significant levels of sulforaphane, a substance that helps detoxify carcinogens from the body, may limit the damage of serious lung disease caused by smoking and protect against damage to blood vessels caused by diabetes. Research at the University of Illinois indicates that teaming fresh broccoli with a spicy food that contains the enzyme myrosinase enhances broccoli's anti-carcinogenic effects. Suggested teammates include radishes, cabbage, arugula, brussels sprouts, mustard and horseradish or wasabi.

Some years back, research indicating that broccoli seed sprouts are higher in sulforaphane than the vegetable itself caused a run on open-pollinated broccoli seeds. *The broccoli seed we offer is not food grade and we cannot guarantee that it is fit for human consumption as sprouted seeds. We have no control over the conditions in which it is stored before it reaches us. Please contact your natural foods wholesaler or retailer for sprouting seed.*



3303TG Tendergreen (67 days) F-1 hybrid. "Tender and delicious," says our star brassica trialer Donna Dyrek. Up to a week earlier than Packman's flat-top with a better looking 6–7" semi-domed head, though not stalwart in extreme heat. The medium-large beads do a good job of shedding water. Pleasing blue-green color. No side-shoot production. Heads matured Sept. 5, 2007, from a July 11 transplanting. Heads are lighter weight than the later-season varieties. ③
A=0.5g, $1.20 **B**=1g, $2.20 **C**=4g, $6.00 **D**=14g, $14.00 **E**=28g, $25.00

Limba (70 days) Please consult our website for possible availability, prices and a full description.

3306SO Solstice OG (71 days) Open-pollinated. Also known as Oregon Long Neck; our seed crop was indeed grown in Oregon. Its name proved prophetic for Dyrek who harvested her first head in 2012 right on the summer solstice from an April 11 start. Its alias comes from its tall leggy plants. As for its mild sweet heads, at 4–5" across, they are intermediate between #**3327** Piracicaba's and those of the domed hybrids. Among the half dozen open-pollinated broccolis in our trial, they were the most uniform and the sweetest, smaller in the summer and tastier in the fall even though they turn purple in frost. Solstice is more noted for its zillion side shoots that follow the main head. Best suited as a fall crop. A winner for o-p broccoli fans. A good seller last year, its first in the catalog. OT-certified. ①
A=0.5g, $1.20 **B**=1g, $2.00 **C**=4g, $5.00 **D**=14g, $14.00

Premium Crop (82 days) F-1 hybrid. Supplier has discontinued; *no longer available.*

Major pests: Cabbage Looper, Diamondback Moth, Imported Cabbageworm
Cultural controls: control cruciferous weeds near crop fields, till-under crop debris of early-season brassicas after harvest.
Materials: Spinosad (**8922**-**4**), Bt (**8902**).

Pest: Flea Beetle
Cultural controls: floating row covers (**9101**), mulch with straw, time plantings for fall harvested crops only, crop rotation, perimeter trap cropping.
Materials: Spinosad (**8922**-**4**), Pyganic (**8925**), Capsaicin (Bugitol **8890**).

Pest: Cabbage Root Maggot
Cultural controls: time planting to avoid first hatching, use row covers, control weeds.
Material: Nematodes (**8941**-**3**).

Major diseases: Black Rot, Alternaria Leaf Spot, Blackleg, Club Root, Downy Milldew, White Mold
Cultural controls: avoid transplanting plants with yellow leaves or v-shaped lesions, crop rotation, destroy crop debris after harvest, avoid overhead irrigation, control weeds, allow for good air movement.
Materials: Actinovate (**8851**), copper compounds (**8861**-**3**) may help for some of these diseases.

Disease: Head Rot
Cultural controls: use well-domed varieties, harvest heads when tight, cut stalks at an angle.
Material: copper

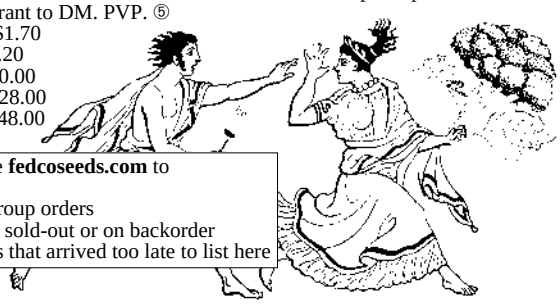
3311GK Green King (85 days) F-1 hybrid. Exceptional tenderness made it the best-tasting of 23 varieties in our trial. King also scored high for its consistent yield of high-quality 8" heads. Market growers appreciate its uniform ripening. Vigorous plants bear thick blue-green domed heads with rather large beads. Side shoots are big enough to be marketable but not plentiful. Green King stands heat well. ③
A=0.5g, $1.50 **B**=1g, $2.40 **C**=4g, $6.20 **D**=14g, $15.00 **E**=28g, $26.00

3312FO Fiesta OG (86 days) F-1 hybrid. Our first organic hybrid broccoli and top seller among the brocs, good for midseason. Compact plants set uniform bright green tightly domed heads that stand both cold weather and heat with considerable aplomb. "Fiesta was every bit as beautiful as Arcadia with large well-shaped heads…and was a few days earlier as well," lauded Janine Welsby. We were amazed by its unprecedented production of side shoots. One day in early October 2007 I harvested ten from one healthy plant, the largest as big as a main head at 6–7", several others nearly as hefty, enough to comprise 3–4 supermarket bunches. OT-certified. ④
A=0.2g, $2.50 **B**=0.4g, $4.50 **C**=1g, $9.00 **D**=4g, $32.00 **E**=28g, $185.00

3313BM Bay Meadows (89 days) F-1 hybrid. Whoever named this broccoli must have been a thoroughbred racing fan from California. Located in San Mateo, Bay Meadows was the longest continually operating racetrack in the U.S. from 1934 until its 2008 demise. Despite carrying an excessive weight burden, Seabiscuit twice won the famous Bay Meadows Handicap. If your broccoli program is handicapped in the heat, Bay Meadows "is your best bet for summer broccoli." When June's cold squalls abruptly yielded late in the month to steamy humidity, it was my lone 2013 survivor. All the others buttoned up, developed weird misshapen heads or otherwise melted down. Similarly, Bay Meadows performed fabulously for Adam Tomash and June Zellers, ripening "without a hiccup" and with great taste and appearance in the much hotter 2012 midsummer season. Well-domed 6–8" heads with blue-green beads atop strong plants. Slightly bigger beads than Arcadia, but not nearly as many side shoots. Tomash says stands heat even better than Arcadia. If you'd have bet on Seabiscuit, bet on Bay Meadows. ⑤ **NEW!**
A=0.5g, $1.50 **B**=1g, $2.40 **C**=4g, $6.20 **D**=14g, $15.00 **E**=28g, $26.00

3314GV Green Valiant (90 days) F-1 hybrid. Valiant, a premier fall broccoli that makes beautiful tight 8–9" heads, is also a notable producer of prolific side shoots, second only to #**3312** Fiesta. Compact plants with very dense light green heads on heavy stems. Not recommended for midsummer when heat causes irregular heading. ⑤
A=0.5g, $1.80 **B**=1g, $3.40 **C**=4g, $10.50 **D**=14g, $28.00 **E**=28g, $50.00

3315GY Gypsy (91 days) F-1 hybrid. This variety is produced by cell fusion. Although considered a form of genetic engineering in Europe, the cell fusion technique used to breed Gypsy does not employ the recombinant DNA technology used in engineering transgenic varieties and our research failed to convince us that it shares the same potential dangers. The NOP has ruled that cell fusion used as part of traditional breeding techniques may be permitted in organic production. That opens our catalog door to our wandering Gypsy. Gypsy has in common with its namesakes the ruggedness to thrive in many different environments holding up reasonably well in the heat of summer, the cool of autumn, and in less-than-stellar soil. A reliable producer of large dome-shaped medium-green 8" heads with medium-tight beads that shed water well. Very uniform, very consistent. Stems and plants capable of growing massive; Adam Tomash harvested one head weighing 2.7 lb. From a May 15 indoor start, he cut his first main head on Aug. 14, 2012. Donna's was a little later on Sept. 2. Our trialers rate its flavor as excellent, sweet and tender. Sparse producer of side shoots. Tolerant to DM. PVP. ⑤
A=0.5g, $1.70
B=1g, $3.20
C=4g, $10.00
D=14g, $28.00
E=28g, $48.00



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3316PO Purple Peacock Gene Pool OG (92 days) Open-pollinated. Tina Plummer of S. Portland, ME, was super excited that Purple Peacock returned in 2013 after four years' absence and so were we. A gourmet ornamental edible cross by Frank Morton of a large green broccoli with two colorful kales. Although this iteration is more uniform than previous ones, it is still somewhat variable. Wavy-looking deeply cut purple leaves with rounded edges are punctuated by pink veins. The sweet broccoli flavor of the head and abundant side shoots is augmented by the kale-like qualities of the leaves, especially as fall delivers its first cold nights. An imposing plant 2½' tall, spreading 2–3' makes quite a spectacle. Purple leaves, stems and heads cook to a dark green or can be enjoyed raw in salads. OT-certified. ①

A=0.5g, $1.20 **B**=1g, $2.20 **C**=4g, $3.50 **D**=14g, $9.00 **E**=28g, $15.00

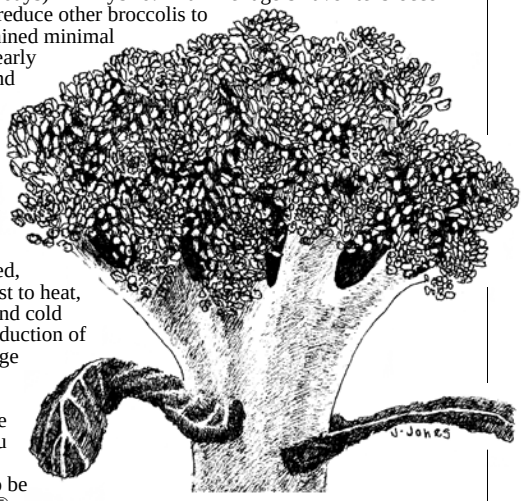
3318TO Thompson OG (92 days) Open-pollinated. A breeding coup by Tim Peters, who has done much work with open-pollinated broccoli. When grown under fertile conditions, Thompson shows excellent resistance to stress and consistently well-formed dark green heads that average 5–6" in diameter with good side-shoot production. For fall crops. All seed is held over. CCOF-certified. ①

A=0.5g, $1.60 **B**=1g, $3.00 **C**=4g, $10.00 **D**=14g, $32.00 **E**=28g, $60.00

3320WM Waltham 29 (92 days) Developed in 1951 and long considered the standard open-pollinated fall broccoli. We've found a reliable strain that consistently produces 6" heads with medium beads on attractive stocky 20" plants. Waltham delivers good-sized central heads, but no side shoots. *Caution: not suitable for summer crops, will not head properly in heat.* ②

A=2g, 80¢ **B**=4g, $1.20 **C**=14g, $2.50 **D**=28g, $3.50 **E**=112g, $6.50 **K**=448g, $17.00

3322AR Arcadia (94 days) F-1 hybrid. Alan LePage's favorite broccoli rocks in conditions that reduce other broccolis to compost. LePage's sustained minimal damage during one 95° early September heat wave, and bounced back quickly after rain. Arcadia's gently mounded dome-shaped frosty bluish-green heads of very refined small beads are consistently marketable and hold a long time. Big and rugged, Arcadia stands up not just to heat, but also to rot, mildew and cold stress. For a copious production of robust side shoots, LePage sidedresses plants after cutting the main heads. Arcadia is well worth the extra effort, he says. You never know what global warming might bring, so be prepared with Arcadia. ⑤



A=0.5g, $1.80 **B**=1g, $3.40 **C**=4g, $10.50 **D**=14g, $28.00 **E**=28g, $55.00

Umpqua OG (95 days) Open-pollinated. *Not available in 2014.*

3326BB Broccoli Blend (67-94 days) A mix of varieties in one packet for home gardeners who want broccoli to mature over a long season. Begin your harvest with Tendergreen and carry through to Arcadia without having to purchase a full packet of each. Varieties in the mix change with availability, but no Romanesco or Piracicaba.

A=0.5g, $1.60 **B**=1g, $3.00 **C**=4g, $10.00 **D**=14g, $28.00

Non-Heading Broccoli *B. o.* (botrytis group)

3327PC Piracicaba (56 days) Open-pollinated. This unusual brassica has generated many tributes. Piracicaba (pronounced peer-a-SEA-cah-bah) is a city and river in Brazil famous for its beautiful waterfalls, and home of the university where this cultivar was developed. About halfway between a heading broccoli and a broccoli raab, these succulent tender small green heads with very large beads make delightful raw eating. Very loose heads, lots of side shoots, sweet stalks. Even the fairly large leaves make excellent greens. Garden writer Barbara Damrosch found it equally delicious steamed. NY State trialers report it is best as a fall crop with relatively good frost tolerance, although it was bred to withstand heat and has produced heads at temperatures in the 90s in trials in California. "So happy to see Piracicaba back again!" exclaimed Rebecca Gilbert and Randy Bendavid of Chilmark, MA. ②

A=2g, $1.20 **B**=4g, $2.00 **C**=14g, $3.60 **D**=28g, $6.50 **E**=112g, $18.00 **K**=448g, $65.00

"Winter would be so dreary without you. Thank you for being you!"
–Jennifer Loros, Thetford, VT

Weight equivalents

1 gram =	.035 oz	
2 grams =	.070 oz	
3 grams =	.106 oz	
4 grams =	.141 oz	
7 grams =	.247 oz	
10 grams =	.355 oz	
14 grams =	.494 oz	
15 grams =	.528 oz	
20 grams =	.710 oz	
28 grams =	.987 oz	
100 grams =	3.53 oz	or .220 lb
112 grams =	3.95 oz	or .247 lb
225 grams =	7.93 oz	or .496 lb
340 grams =	11.99 oz	or .750 lb

Romanesco *B. o.* (botrytis group)

One of the most beautiful of plants when grown well. Chef Odessa Piper calls romanesco's cone-shaped somewhat irregular whorl of chartreuse florets "broccoli on acid." According to **almostachef.com "**its shape is a perfect illustration of the mathematical principle of fractals…all florets are identical to one another" except in size, and each one multiplied is an exact replica of the whole. The florets grow in a spiral called the Fibonacci series "following the golden number believed by Renaissance artists to be the origin of aesthetic harmony." Needs adequate spacing, a long season and extremely high soil fertility. We had fantastic results planting in raised beds with 8" of well-rotted manure. Well-grown plants are huge, and need about 10 sq ft each. Should be started indoors in March or April and transplanted out in late May or June. Be patient; needs a long season but doesn't mind cool weather.

Tipoff OG (100 days) F-1 hybrid. Supplier has discontinued. *No longer available.* We've replaced with #**3329** Veronica.

3329VR Veronica (98 days) F-1 hybrid. A reliable and refined version of Romanesco broccoli to replace Tipoff. Tender and delicate as a crudité, sweetness plus a fine brassica zing. Also quite flavorful cooked. First ripened Sept. 16-19 for trialer Donna Dyrek and was still producing in mid-October from a May 27 greenhouse start. The supplier claims average weight is 4 lb per head, but in conditions of high fertility and wide spacing, Dyrek's averaged 8" across and 5 lb, not quite as large as Tipoff. For fall production only. Resists purpling/red tipping during heat. ④ **NEW!**

A=0.1g, $2.40 **B**=0.3g, $6.00 **C**=1.2g, $20.00 **D**=6g, $75.00

BRUSSELS SPROUTS *B. o.* (gemmifera group)

"They are a delicacy not surpassed by the finest cauliflower," asserts the 1915 Salzer catalog. I agree, but like cauliflower, they are fussy. They must be started indoors no later than early April and transplanted into very fertile soil. A real key to success is to top the plants around Sept 1. When I experimented by topping some and leaving others, the difference was dramatic. Within two weeks the topped plants were putting all their energy into making sprouts while the untopped plants continued to shoot up more foliage and make only miniscule sprouts. Very hardy, improved by frost and can be harvested past the first snowfall.

3336RN Roodnerf (96 days) Open-pollinated. So far the best open-pollinated brussels sprout we've found. By late September 2007 these vigorous medium-large colorful plants had set plump green sprouts along their stems. These were robust and flavorful berries, not up to the size of the best hybrids or as uniform, but dwarfing those of the o-p competition. Not as good in my 2009 trial on sandy loam; they may prefer clay. Purple stems along axils lend a decorative touch to the plants. "I can hardly wait for the Roodnerf sprouts so this summer/fall I can ask random people if they want to see my Roodnerf," winked Lucy Goodman of Boulder Belt Eco-Farm in Eaton, OH. ②

A=2g, $1.20 **B**=4g, $2.00 **C**=14g, $5.00 **D**=28g, $8.00 **E**=112g, $25.00

3339GU Gustus (99 days) F-1 hybrid. 2009 was the perfect year to grow brussels sprouts. Faced with the daunting task of replacing Oliver, I set out 76 plants representing 7 different varieties, most on May 27. All loved the cool temperatures and 23 days of rain in June, and thrived in my sandy loam, growing enormous and disease-free. While nothing can match Oliver's ease of growing, earliness and huge production, Gustus made a valiant effort and by late September boasted lovely sprouts. They were medium-sized, slightly oval, remarkably uniform (perfect for market) and grew large farther up the stalk after I topped the plants Sept. 7. They showed not a hint of rot, even after two hurricane rains. A representative sample of 10 weighed a respectable 6 oz. Best of all, they won our taste test, with a smooth texture and no cole-ish aftertaste. Enjoy them with gusto! ⑤

A=0.5g, $2.50 **B**=1g, $4.80 **C**=4g, $18.00 **D**=14g, $55.00 **E**=28g, $100.00

3341FS Falstaff (102 days) Open-pollinated. We'll raise a glass to Falstaff. We loved the beauty of red varieties such as Rubine, but never could get a single sprout to mature until we found Falstaff. From Thompson & Morgan, the first red brussels sprout to ripen in our climate, Falstaff is not only ornamental but also extremely savory. Cooking brings out its tender nutty sweetness while allowing it to retain bluish-purple pigments. It cooks quickly, though, so don't overdo it. "A big hit for its flavor," says Brenin Wertz-Roth. Good production one year, only fair the next, sprouts with beautiful color, wide size variation, but most quite small compared to the green hybrids, and can be late coming. The color intensifies after a hard frost. The plants tend to sprawl. ③

A=0.5g, $1.40 **B**=1g, $2.50 **C**=4g, $6.00 **D**=14g, $16.00 **E**=28g, $30.00

3344DB Diablo (110 days) F-1 hybrid. Home gardeners have yet to give this devil its due. It might be a little slow getting going, but for those who have a long enough season, Diablo is dependable and productive. These are uniform good-looking solid medium-sized sprouts of good quality. A representative sample of 10 sprouts weighed 7 oz in the 2009 trial. CSA grower Jan Goranson recommended Diablo for its disease resistance and ability to produce a consistent sprout every time. ④

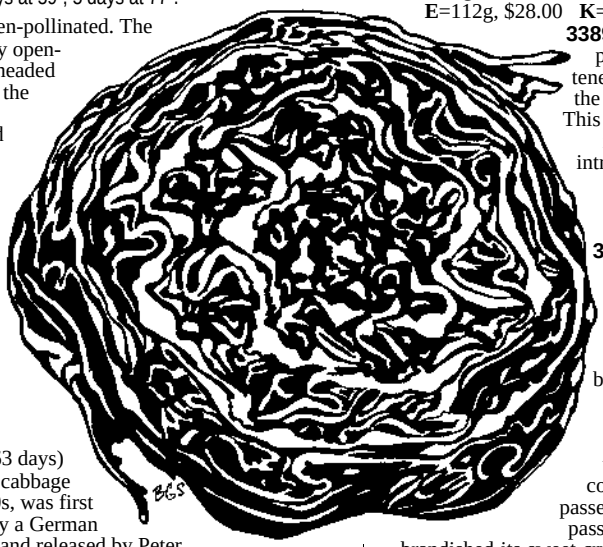
A=0.5g, $2.70 **B**=1g, $5.20 **C**=4g, $20.00 **D**=14g, $60.00 **E**=28g, $110.00

CABBAGE *B. o.* (capitata group)

Efforts to eat more local produce are turning people's attention back to lactic fermentation, the age-old method for making pickled foods like sauerkraut and kimchi. Easy to do at home, lactic fermentation is the work of a succession of microbial species. The first ones produce lactic acid making the mix acidic, killing undesirable organisms and fostering microbes that complete the reaction. Sauerkraut is immune-enhancing and easier to digest with more available nutrients than raw cabbage. See *Preserving Food without Canning or Freezing* (**9802**) and *The Art of Fermentation* (**9614**) in the book section for explanations and recipes.

Exposure to hoarfrost is good for cabbages. They double their sugar content after one month of cold. Blue-purple foods such as red cabbage and purple cauliflower contain anthocyanins and phenolics which benefit the urinary tract, memory and immune system.

Minimum germination soil temperature 40˚, optimal range 55–95˚, optimal temp. 77˚, emergence takes 15 days at 50˚, 9 days at 59˚, 5 days at 77˚.



3352GA Golden Acre (62 days) Open-pollinated. The best choice for those preferring an early open-pollinated cabbage that's not a pointy-headed intellectual from Jersey. A selection of the Copenhagen Market type billed as "new…the earliest of the round-headed cabbages" in the 1928 Jerome B. Rice catalog. Heads average 3–5 lb. Short stems with sparse wrapper leaves and medium-sized core keep it compact. Not completely uniform in the 2013 trial, but highly rated in the taste test. Home gardeners esteem its excellent flavor, particularly in the sweet tender hearts. Grey-green heads, some with a faint reddish tint in the outer leaves, white interiors. Not long standing. ②③

A=2g, 80¢ **B**=4g, $1.20 **C**=14g, $2.80 **D**=28g, $4.00 **E**=112g, $9.00 **K**=448g, $18.00

3355EJ Early Jersey Wakefield (63 days) Open-pollinated. This wonderful early cabbage originated in England in the early 1800s, was first grown in America in 1840, perfected by a German truck gardener in northern New Jersey and released by Peter Henderson in 1868. Henderson in 1902 asserted that "it was more largely grown than all other first early cabbages combined" and called it an "old reliable always to be depended upon for its uniformity in earliness and crop." Anne Elder considers it a fantastic fall cabbage as well. Wakefield's compact medium 2–3 lb heads are distinctively pointy. The pyramidal shape with sparse outside foliage permits close spacing. Tender flavorful waxy-looking Wakefield has stood the test of the ages and is still prized by home and market gardeners. ②③

A=2g, 80¢ **B**=4g, $1.20 **C**=14g, $2.80 **D**=28g, $4.00 **E**=112g, $9.00 **K**=448g, $18.00

3358GZ Gonzales (66 days) F-1 hybrid. These days many families like compact cabbages. Commercial growers like them, too, because they can plant densely for a high return per acre. Gonzales is our choice in the early baby cabbage class. The round upright heads are slightly larger than softballs when mature, about 4–6" in diameter weighing no more than 3 lb. Good medium-green color with a short core. Dense, sweet and spicy with good holding qualities. Tender, makes a good summer slaw. ④

A=0.5g, $1.80 **B**=1g, $3.40 **C**=4g, $10.50 **D**=14g, $28.00 **E**=28g, $54.00

3370SR Super Red 80 (80 days) F-1 hybrid. Super Red 80 ripens well before Ruby Perfection, with smooth tight round medium-dark red 3–5 lb heads. Splendid appearance will appeal to market growers. Resists splitting. Tender and crisp with a pleasing flavor. Sales have increased ten consecutive years, quadrupling since 2003. ⑤

A=0.5g, $1.90 **B**=1g, $3.40 **C**=4g, $10.50 **D**=14g, $32.00 **E**=28g, $60.00

3375RP Ruby Perfection (85 days) F-1 hybrid. This fancy midseason type has produced some of the loveliest cabbage we've ever seen: solid deep purple-red spherical heads averaging 4–6 lb, occasionally reaching 8 lb. "Hard as a rock," observed Jason Kafka. A great storage cabbage; will keep till May in the root cellar. Low tolerance to BR. Survived outdoor temperatures of 18˚ double-covered under Agribon 19. ⑤

A=0.5g, $2.10 **B**=1g, $4.00 **C**=4g, $13.00 **D**=14g, $38.00 **E**=28g, $70.00

3378ML Melissa Savoy (85 days) F-1 hybrid. A gorgeous savoy, with 2–4 lb solid slightly flattened light green heads surrounded by attractive dark blue-green waxy wrapper leaves. Can grow twice that size given high fertility and wide spacing. A vigorous grower even in cold wet conditions, Melissa ripens around Sept. 1 from early June transplanting. Flavor improves with cold weather. Adapted to close spacing. For dependability, uniformity, attractiveness and taste, Melissa can't be topped. FY, TB tolerant. ④

A=0.5g, $2.50 **B**=1g, $4.80 **C**=4g, $18.00 **D**=14g, $55.00 **E**=28g, $100.00

3380FG Frigga Savoy (86 days) Open-pollinated. Usually grows compact 3 lb round 6" balls, though under wide spacing and high fertility can achieve double that size. With its highly savoyed dark green wrapper leaves curling tightly around the core, it is as handsome a plant as I ever hope to see! Real cabbage flavor with some sweetness, texture on the dry side. Holds in the field for a month after maturity. For savoy connoisseurs. ③

A=2g, $1.30 **B**=4g, $2.50 **C**=14g, $5.00 **D**=28g, $8.50 **E**=112g, $28.00 **K**=448g, $90.00

3384DV Des Vertus Savoy (95 days) Open-pollinated. From the 1800s, also known as Large Drumhead Savoy. A writer in the May 1882 *American Agriculturist* urged that "savoy cabbage is as much superior to the common hardheaded kinds as the least cultivated grape is superior to the ornamental fox-grape of the woods." French variety features large medium-green heads averaging 4–6 lb. Flavor is mild and juicy, semi-sweet. ②

A=2g, $1.30 **B**=4g, $2.50 **C**=14g, $5.00 **D**=28g, $8.50 **E**=112g, $28.00 **K**=448g, $90.00

3389RR Mammoth Red Rock (100 days) Open-pollinated. A large late storage cabbage with firm flattened round 5–8 lb heads, 8–10" across and red-purple to the core. Rated as a good keeper with a crisp sweet taste. This open-pollinated favorite goes back to 1889. Vaughan in 1904 called it "the surest heading red cabbage ever introduced." R.B. Dunning & Co. of Bangor, ME, sold a packet for a nickel and an ounce for 35¢ in 1936. ②

A=2g, 80¢ **B**=4g, $1.20 **C**=14g, $2.80 **D**=28g, $5.00 **E**=112g, $10.00 **K**=448g, $21.00

3390TB Tribute (103 days) F-1 hybrid. As I strolled down cabbage row, I could imagine LeBron James chucking these round green basketballs through the hoop, though I'm not sure how many shots he'd get off before one split. I pay Tribute to these amazingly beautiful enormous round heads, as uniform as a bunch of NBA balls in their bag before game time, but weighing 12.5 lb each. I had no plans to choose another autumn cabbage for this catalog—Tribute selected itself. Earlier and larger than #**3394** Bartolo with huge wrapper leaves that provide perfect ground cover: no weeds possible! We won't know till May if it passes muster as a storage cabbage, but we do know that it passed our taste test with light green flying colors. Raw it brandished its sweet crunchiness with a cabbage taste in its ribs. Very good flavor for such a big cabbage. Cooked it remained sweet with a subtle brassica flavor, a close second or tied for first with Golden Acre for tops in our test. Fully ripe around Oct. 1 from a July 10 transplanting. Give this champ some space as well as Tribute. ③ **NEW!**

A=0.5g, $1.20 **B**=1g, $2.20 **C**=4g, $5.50 **D**=14g, $12.00 **E**=28g, $22.00

3391DD Deadon Savoy (105 days) F-1 hybrid. You won't find a lovelier cabbage than Deadon. Its savoyed pinkish-purple outer leaves, often used for garnish, are dusted with grey, while its interior core, great for salads and cole slaw, is light green. The outer color intensifies as temperatures cool in the fall. Sets solid medium-large 3–6 lb heads with densely packed innermost leaves that are very sweet with a spicy nip. Dead certain to be a flavorful cool-weather treat, it even over-wintered in Donna's trials, so it can nourish you in spring as well as late fall. "Psyched to see the January King-type cabbage. Gunma's outer leaves couldn't hold up once nighttime temperatures hit the 20s," related Elizabeth Wheeler and Lisa Bergin of Minneapolis, MN. Resists Y. ❄ ④

A=0.1g, $2.00 **B**=0.3g, $3.80 **C**=1.2g, $12.00 **D**=6g, $45.00

3392GM Gunma (110 days) F-1 hybrid. Our choice for a superior flat-topped green cabbage ideal for cooks and gourmets, good for kraut and kimchi. Its large 5–7 lb heads grow nearly 1' across, yet remain almost coreless. Although ready on Aug. 2 from a May 21 transplanting, these cabbages sat in the field for two months without splitting. Sweet tender wrapper leaves suitable for cabbage wraps and rolls. Not for storage. All seed is held over. Resists FY. ④

A=0.2g, $1.80 **B**=0.4g, $3.40 **C**=1g, $6.00 **D**=4g, $20.00 **E**=28g, $120.00

3394BT Bartolo (115 days) F-1 hybrid. Consider Bartolo if you need an excellent hybrid storage cabbage that will last and last. During a bizarre mild winter in Michigan, Anne Elder picked her last heads of #**3392** Gunma and Bartolo on Jan. 12! Sits high off the ground with large round 4–8 lb dark green heads, well-protected with waxy thick serrated wrapper leaves. Very high-yielding and a beautiful plant in our trials. Tolerates BS and TB. ④

A=0.5g, $2.60 **B**=1g, $5.10 **C**=4g, $20.00 **D**=14g, $68.00 **E**=28g, $130.00

3397WR Wirosa Savoy (125 days) F-1 hybrid. A savoy cabbage ideal for late autumn or capable of wintering over with protection. The solid uniform 8" glossy blue-green heads are closely wrapped with crinkly leaves. From an Aug. 18 start and mid-September transplanting, 4 of 6 survived a Maine winter with no protection except snow cover. They continued growing all the next summer, not finishing until mid-September, so as a winter cabbage they need more than a year. With an early spring start they'll be ready the same fall. Good yields and quality for fresh market and storage. ❄ ④

A=0.1g, $2.00 **B**=0.3g, $3.80 **C**=1.2g, $11.00 **D**=6g, $42.00 **E**=24g, $160.00

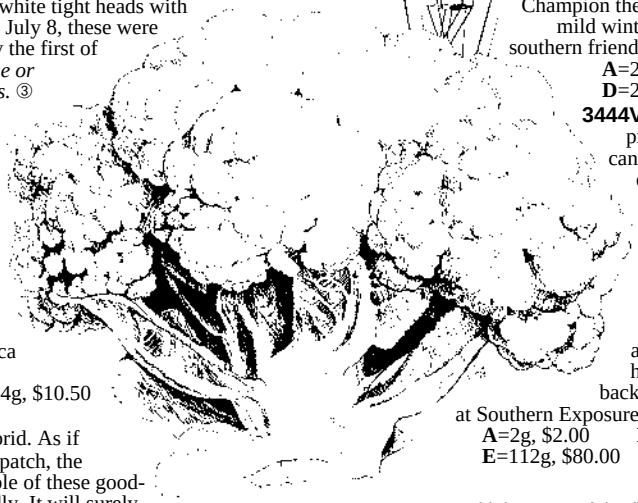
CAULIFLOWER *B. o.* (botrytis group)

Start like broccoli but needs more TLC. Do not allow to get pot-bound; avoid interruptions in growth. Cauliflower heads will "button" under stress. When heads first appear, bend leaves over curd to prevent discoloring.

Minimum germination temp. 40˚, optimal range 55–80˚, ideal temp. 77˚, emergence takes 20 days at 50˚, 10 days at 59˚, 6 days at 68˚, 63% normal seedlings at 77%, only 45% normal seedlings at 86˚.

3404CS Charming Snow (60 days) F-1 hybrid. Our first early cauliflower, a fine product of Taiwanese breeding. Its short white stems bear compact 1–2 lb uniform round firm white tight heads with fine beads. Though seeded as late as July 8, these were already heading for Donna Dyrek by the first of September. *Note: Heads not as dense or substantial as the maincrop varieties.* ③

A=0.5g, $1.30 **B**=1g, $2.20 **C**=4g, $6.00 **D**=14g, $14.00 **E**=28g, $25.00



3410SC Snow Crown (70 days) F-1 hybrid. Nothing comes close to Snow Crown for the second-early slot. Makes cauliflower a cinch to grow. Dependable producer of uniform 6–7" heads early summer through October. Drought resistant. Sometimes develops pink heads in adverse conditions. 1975 All-America winner from Takii. ⑤

A=0.5g, $2.00 **B**=1g, $3.80 **C**=4g, $10.50 **D**=14g, $35.00 **E**=28g, $65.00

3417GR Graffiti (80 days) F-1 hybrid. As if aliens had landed in the cauliflower patch, the brilliant—almost psychedelic—purple of these good-sized heads is decidedly other-worldly. It will surely draw customers to your market display and keep them lingering. Much brighter purple than #**3421** Violet Queen, Graffiti boasts a true cauliflower head on large plants with dark green leaves. Resists summer heat and performs even in drought, but very slow to head up in cool weather. Day-glo florets make delightful crudités, a delicious cooked vegetable or colorful kimchi. The color fades to bluish-purple when cooked, but can be preserved by adding a tablespoon of lemon juice to the cooking water. ⑤

A=0.1g, $2.20 **B**=0.2g, $3.60 **C**=1g, $14.00 **D**=4g, $50.00 **E**=16g, $180.00 **K**=32g, $350.00

3421VQ Violet Queen (80 days) F-1 hybrid. About halfway between broccoli and cauliflower, each plant sets one purple head that doesn't require tying. No side shoots. A tasty novelty for adding violet color to salads and dips. Turns light green when blanched. Has been upstaged by #**3417** Graffiti. Slow sales so *this year will be its last hurrah.* ⑤

A=0.5g, $3.90 **B**=1g, $7.60 **C**=4g, $30.00 **D**=14g, $90.00 **E**=28g, $170.00

3428SM Snow Mystique (93 days) F-1 hybrid. On Oct. 11 our trialer noted, "I went out today and found two absolutely beautiful and large cauliflower heads. They were Snow Mystique. Big, tight and gorgeous!" Mystique has all the attributes we loved in Cassius: clean, white, dense well-proportioned heads, the same good upright habit and the dome shape to ward off excess moisture plus a tender flavor not expected from such a massive plant. Massive it was, heads rated at 1.8 lb average by our supplier, but double that weight in our trial. Perfect for end of September and early October when cauliflower is at its best in our climate. Can be slow-growing in higher elevations and cold spots. ⑤

A=0.5g, $2.00 **B**=1g, $3.80 **C**=4g, $12.00 **D**=14g, $35.00

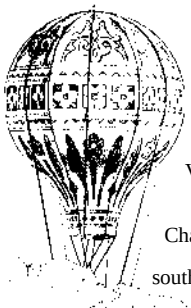
3438CC Candid Charm (95 days) F-1 hybrid. These large snow-white curds are sure to please cauliflower lovers. I've grown some awesome heads, most in the 3–4 lb range, one 12x14" monster as big as 6–7 lb, but have been topped by Adam Tomash and June Zellers who produced an astounding 9-pounder and by Janine Welsby who was close behind at 8½ lb! Welsby lauds Charm for producing beautiful tight white heads "even in marginal years." Adapted to fall production only. Easy to grow and not fussy then. ⑤

A=0.5g, $2.40 **B**=1g, $4.20 **C**=4g, $16.00 **D**=14g, $50.00 **E**=28g, $95.00

3440SY Symphony (96 days) F-1 hybrid. These immense heads, up to a foot across, look like they were injected with BGH—that's Brassica Growth Hormone, for the uninitiated. They were the classiest as well as the largest cauliflowers Donna ever grew, as tight as they were enormous, with no hollow stems. She raved about their sweetness and lack of brassica bite. Maybe we should just credit superior genetics. Donna started the seeds on May 30, transplanted them on July 8 and harvested Symphony the 2nd week of October 2007. Requiring a long season, Symphony is for fall harvest only. Donna, what's in that manure you use, anyway? ⑤

A=0.2g, $1.70 **B**=0.4g, $3.00 **C**=1g, $5.50 **D**=4g, $16.00 **E**=28g, $80.00

"Thanks Fedco for offering small quantities at low low prices!
–Michael Horst-Kotter, Rochester, NY



COLLARDS *B. o.* (acephala group)

To avoid flea beetles, plant in July for Sept. maturity. Resembles kale, but not savoyed. William Woys Weaver says that the term collard is a corruption of colewort. Coleworts were kales or small cabbages in their leafy state before heading.

3441CH Champion (60 days) Open-pollinated. Rich dark Vates strain selected to stand longer. Thin to 12" apart for good size. Best as a fall crop. For greens into November in northern New England. On Cape Cod, Lillian Kuo was still harvesting Champion the second week of February without protection over a mild winter. Also survived Roberta's overwintering trial. Our southern friends enjoy the greens all winter. ❄ ③

A=2g, 80¢ **B**=4g, $1.20 **C**=14g, $2.20 **D**=28g, $3.20 **E**=112g, $4.40 **K**=448g, $14.00

3444VC Variegated ECO (61 days) Open-pollinated. A prime example of the old adage that first appearances can be deceiving. The seedlings show no variegation. It doesn't appear until September. In my initial look at Donna Dyrek's trials one August its waxy leaves had taken on a sickly yellow-green hue. When I returned after the nights got nippy the plants had transformed, developing beautiful white ribs for a dazzling display of contrasting color. Not just eye candy, they're also sweet and tender eating. Dyrek has been enjoying them for years. When fall comes around she throws the Champions to the animals and heads for Variegated. Florida family heirloom dating back to around 1910 was introduced 1999 by our friends at Southern Exposure. Still shows some variation. ②

A=2g, $2.00 **B**=4g, $3.80 **C**=14g, $12.50 **D**=28g, $24.00 **E**=112g, $80.00

KALE

To avoid the worst of the flea beetle season, direct seed in July for Sept. maturity. Kale is quite hardy and the flavor is enhanced by fall frosts.

Curly Leaf KALE *B. o.* (acephala group)

3450BO Beedy's Camden OG (60 days) Open-pollinated, semi-curled with wide leaves. Could give Camden, currently known as a tourist mecca on the Maine coast, a new claim to fame. Social justice advocate Beedy Parker provided us with seed for this hardy green kale that overwinters for her in Zone 5, and comes back with great gusto for me in Colrain, MA, self-sowing year-round! It has not survived winters at Donna Dyrek's in Zone 4 in Central Maine. Abundant wavy blue-green leaves are full to the bottom, not as tightly ruffled as Winterbor. More tender than the Siberian types and lasts longer into the fall. "Juicy and sweet in the spring, satisfying even when people are looking forward to lettuce," said Catherine Creeger of Ithaca, NY. "Also the last to bolt in my hoophouse in the spring," added Wendy Carpenter of Modoc, IN. ☙2009. OT-certified. ❄ ①

A=2g, $1.50 **B**=4g, $2.80 **C**=14g, $6.00 **D**=28g, $10.00 **E**=112g, $30.00 **K**=448g, $100.00

3452RB Redbor (60 days) F-1 hybrid. A spectacular all-red kale, highest rated in the OSU trials. Frilly ruffled leaves take on dramatic purple coloration in cool weather. A superb ornamental edible, gorgeous enough to make a terrific flower border or edge plant. Can be grown in summer but really comes into its own in fall. Quite cold hardy. Grows to 3'. For a rainbow kale patch interplant with White Russian, Red Russian, Winterbor and Nero di Tuscana. "Redbor is my new favorite kale. Not only is it beautiful and tasty…it [is] really resistant to flea beetles (adjacent Red Russian plants were seething with the little guys and completely destroyed) while it was untouched. Also less susceptible to aphids. I like the spring coloring, too," observed Brenin Wertz-Roth. ❄ ④

A=0.5g, $3.10 **B**=1g, $5.90 **C**=4g, $23.00 **D**=14g, $80.00 **E**=28g, $155.00

3453WB Winterbor (60 days) F-1 hybrid. Winterbor was the most vigorous grower in each of our last three kale trials, showing the best cold hardiness and the richest blue-green color. Curled leaves are highly ruffled with good mild flavor, especially after they've been tickled by some of our frigid November nights. "Our members love the crinkles of Winterbor. Makes great baked kale chips," says Anne Elder. ❄ ④

A=0.5g, $2.00 **B**=1g, $3.50 **C**=4g, $10.50 **D**=14g, $35.00 **E**=28g, $68.00

3457LO Rainbow Lacinato Gene Pool OG (61 days) Open-pollinated. Who but Frank Morton would think to cross Lacinato with Redbor? The result? A stunning kale that combines some of the best features of both in a banquet of diverse shapes and colors. Broader leaves than Dinosaur Kale are overlaid with reds, blues and purples. In addition to its color, Redbor lends its productivity, super cold hardiness and reluctance to bolt to this heavenly combination. These rainbow leaves combine red veins, a range of purples and blue-greens with curly edges and some savoying. Only partly stabilized; retains considerable variation, but that's part of the fun and beauty of it. OT-certified. ❄ ①

A=2g, $1.60 **B**=4g, $3.00 **C**=14g, $8.00 **D**=28g, $13.00 **E**=112g, $44.00

Siberian KALE *B. napus* (pabularia group)

Red Russian (60 days) Open-pollinated. Called Buda Kale by Fearing Burr in 1863, Ragged Jack by Vilmorin-Andrieux in 1885, and Communist Kale in 2006 by workers at Darthia Farm in Gouldsboro, ME. Russian traders brought this Siberian heirloom to Canada in the 19th century. It has undergone a rousing revival in recent years and we now sell more than 215 lb of these minute seeds annually. Vigorous edible landscape plant a big hit for its unsurpassed tenderness and delicate flavor. Its oakleaf foliage colors after fall frosts. Use soon after picking, or chill leaves in cold water; otherwise wilts quickly. Red and purple veining changes to dark green when cooked. Tolerates outside temperatures of 14˚ double-covered under Agribon 19. ❄

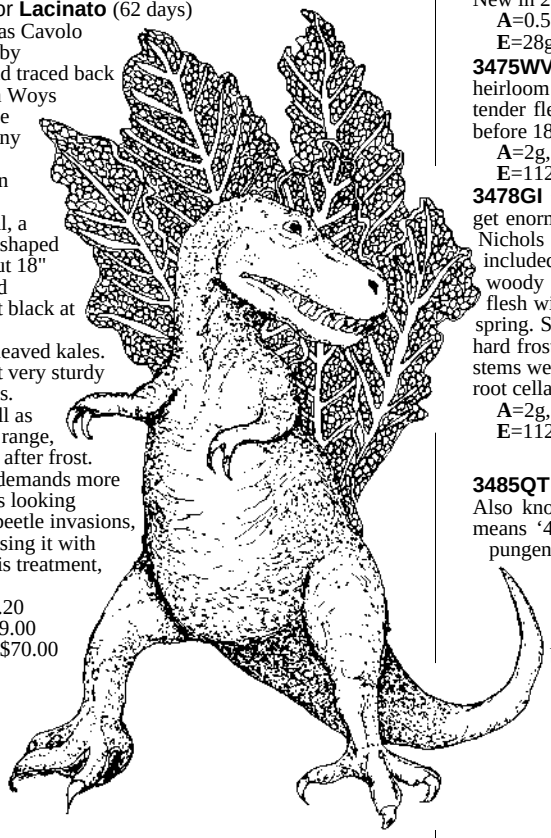
3461RC Red Russian ②③
A=2g, 80¢ **B**=4g, $1.20 **C**=14g, $2.80
D=28g, $4.00 **E**=112g, $7.80 **K**=448g, $22.00
L=5lb, $98.00

3462RO Red Russian OG CCOF-certified. ③
A=2g, $1.10 **B**=4g, $2.00 **C**=14g, $3.50
D=28g, $6.00 **E**=112g, $15.00 **K**=448g, $46.00
L=5lb, $215.00

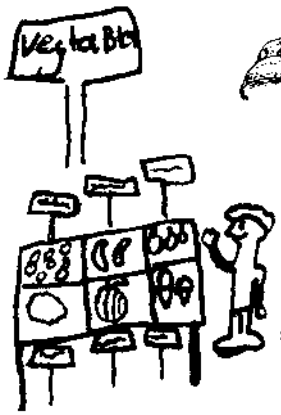
3464WO White Russian OG (60 days) Open-pollinated. A flat-leaf Siberian type, silvery green with white veining. Similar to Red Russian, but a few inches taller, a third more productive, with larger, more serrated leaves. Also, much hardier than Red Russian, will hold into November without protection and thrive in an unheated greenhouse, even if temperatures go down to 0˚. Gene has harvested White Russian outdoors in Waterville out of the January snow. If season is extended, White Russian will produce new clusters of smaller tender secondary leaves from old axils. As with other Siberian kales, flavor gets sweeter with frost. OT-certified. ❄ ①
A=2g, $1.50 **B**=4g, $2.80 **C**=14g, $8.00 **D**=28g, $12.00
E=112g, $35.00 **K**=448g, $120.00

Dinosaur KALE *B. o.* (acephala group)

3467CP Nero di Tuscana or **Lacinato** (62 days) Open-pollinated. Also known as Cavolo Palmizio. Nero was described by Vilmorin-Andrieux in 1885 and traced back to the 18th century by William Woys Weaver who calls it "one of the most beautiful kales to grace any kitchen garden" and suggests interplanting with a vivid green lettuce for a spectacular color combination. Nero is elemental, a stripped-down version of kale shaped like a miniature palm tree about 18" high. Very dark green wrinkled strap-like leaves appear almost black at a distance, looking minimalist compared with the lush curly-leaved kales. Its tough leaf strength makes it very sturdy for distributing into CSA boxes. Delicious and nutritious as well as adapted to a wide temperature range, its sweet mild flavor improves after frost. According to Alan LePage, it demands more fertility than other kales. If it is looking anemic after the summer flea beetle invasions, LePage recommends side-dressing it with fertilizer or compost. Using this treatment, he's grown 6' plants! ②



A=2g, $1.20 **B**=4g, $2.20
C=1 4g, $4.80 **D**=28g, $9.00
E=112g, $25.00 **K**=448g, $70.00

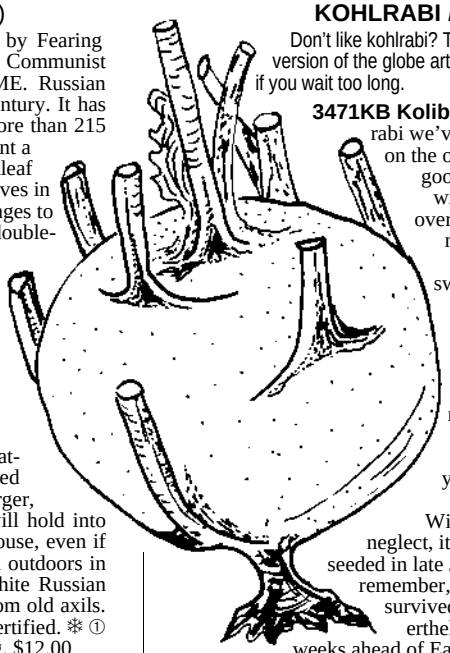


KALE MIX

3469KM Kale Mix (60-62 days) Now that we've added so many tempting choices to our kale selection, maybe it's hard to pick just one or two. Here's the solution: enjoy the whole medley of diverse colors, patterns and shapes for a mere buck sixty. Four years on the list; sales have increased each year.
A=2g, $1.60 **B**=4g, $3.00
C=14g, $8.00 **D**=28g, $14.00
E=112g, $50.00

KOHLRABI *B. o.* (gongylodes group)

Don't like kohlrabi? Try harvesting it young when it tastes like a humble version of the globe artichoke. Its texture turns tough, woody and inedible if you wait too long.



3471KB Kolibri (45 days) F-1 hybrid. The best purple kohlrabi we've found: quick growing, very uniform, purple on the outside, crisp and white on the inside, reliable, good-tasting and productive. An August planting will size up in October. Very hardy; will winter over with only snow cover for protection—in fact made it through the open winter of 2011-12 in Maine. Interplant with #**3036** Bright Lights swiss chard for a dazzling display. ❄ ④
A=0.5g, $2.10 **B**=1g, $4.00 **C**=4g, $15.00
D=14g, $50.00 **E**=28g, $92.00

3473WN Winner (45 days) F-1 hybrid. Longtime customer Brian Cramer of Hutchins Farm in Concord, MA, convinced me to grow kohlrabi again for the first time in fifteen years. "Winner," he suggested, "has been my most successful kohlrabi for many years, always beating out others I have tried in consistency, quality and appearance." I grew Winner in 2012 and, in defiance of my shameful neglect, it proved to be everything Cramer said. Direct-seeded in late June into one of the worst droughts I can ever remember, irrigated sparingly, thinned belatedly, it even survived my two-week midsummer absence and nevertheless produced its lovely green stem bulb three weeks ahead of Early White Vienna. Its tender sweet flavor was a revelation. Perhaps you, too, have overlooked this unusual under-rated vegetable, or maybe you were just waiting for us to offer a real Winner? New in 2012. ⑤
A=0.5g, $1.40 **B**=1g, $2.40 **C**=4g, $6.00 **D**=14g, $16.00
E=28g, $28.00

3475WV Early White Vienna (58 days) Open-pollinated. Early dwarf heirloom variety with short tops and medium stems. Bulbs have crisp white tender flesh with a pungent taste. Do not overcrowd. From Central Europe before 1860. ②
A=2g, 80¢ **B**=4g, $1.20 **C**=14g, $2.50 **D**=28g, $3.50
E=112g, $5.50 **K**=448g, $18.00

3478GI Gigante (130 days) Open-pollinated. You might guess that these get enormous. And they do, regularly exceeding 10" in diameter and 10 lb. Nichols Garden Nursery reported that the world record is 62 lb, leaves included. Unlike other kohlrabi, this Czechoslovakian heirloom doesn't get woody even when it grows enormous. Gigante's crisp white mildly tangy flesh will add zest to your meals while you await the first edible greens of spring. Sow in spring for late fall harvest. As a bonus, its leaves after a few hard frosts in the fall "were like the sweetest and most tender kale…and the stems were like the most delicious broccoli stems," praised Elisa Carbone. A root cellar staple and a favorite of Jason Kafka who plants a 300' bed. ③
A=2g, $1.10 **B**=4g, $2.00 **C**=14g, $4.00 **D**=28g, $8.00
E=112g, $16.00 **K**=448g, $50.00

RAAB

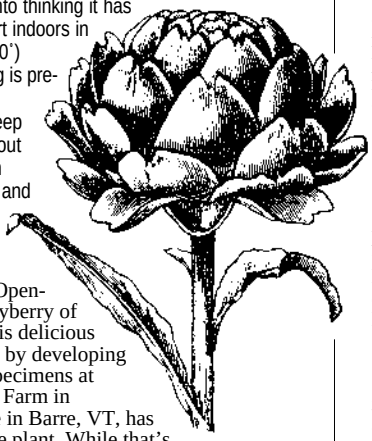
3485QT Quarantina (40 days) Open-pollinated. *B. rapa* (ruvo group) Also known as Rapini here and *Broccolo Asparago* in Italy, *Quarantina* means '40 days.' Raab is a non-heading version of broccoli with a more pungent flavor. Harvest young stems, leaves and small flower buds. Steam, stir-fry or add to salads. Many people try this as a spring crop with poor results. If the flea beatles don't get you, the summer heat will. Raab is much better as a fall crop. It will hold a lot longer and cool nights improve the flavor. Tender tips of young kale leaves make a better spring crop. ②
A=2g, $1.00 **B**=4g, $1.80 **C**=14g, $4.00
D=28g, $6.00 **E**=112g, $15.00 **K**=448g, $45.00

Mount Vernon Farmers' Club

The Mount Vernon Farmers' Club met for a few years,
just after the Civil War,
an early version of the Grange.
When I read the Club's minutes,
handwritten in an old journal,
George Washington Gordon,
who lived on this farm,
said he 'lost his courage',
a phrase that carried from the Civil War
through a few years ago when Tunny decided
he couldn't move a large rock
with his small backhoe.

It's a phrase we all experience
a few times in our lives,
but it can't be the model
for how to live each day.

GLOBE ARTICHOKE *Cynara scolymus*



Artichoke seed needs vernalization to trick it into thinking it has already gone through a season of growth. Start indoors in mid-February at warm temperatures (at least 60˚) avoiding direct hot sun or overwatering (misting is preferred). Transfer after 6 weeks to a cold frame when outdoor temperatures stay above 25˚. Keep as cool as possible over the next 6 weeks without going below 25˚. Set out with IRT plastic mulch (**9096**) and/or row covers (**9101**). Feed heavily and give lots of moisture and lots of space (10 sq ft per plant). **~20 seeds/g. Days to maturity are from date of transplanting, not seeding.**

3608SO Imperial Star OG (120 days) Open-pollinated. Wayne Schrader and Keith Mayberry of California Cooperative Extension made this delicious vegetable accessible to northern gardeners by developing Imperial Star in 1991. We've seen good specimens at Hidden Valley Farm in Alna and at Forest Farm in Harborside. Market gardener Alan LePage in Barre, VT, has gotten as many as eight fruits from a single plant. While that's unusual, most plants will bear more than one, producing in the cooler fall weather that they prefer to summer's full heat. Plants (both seedlings and mature) can tolerate light frosts but not hard ones. PVP. *Caution: May not ripen in northernmost areas.* AGRIOR-certified. ③

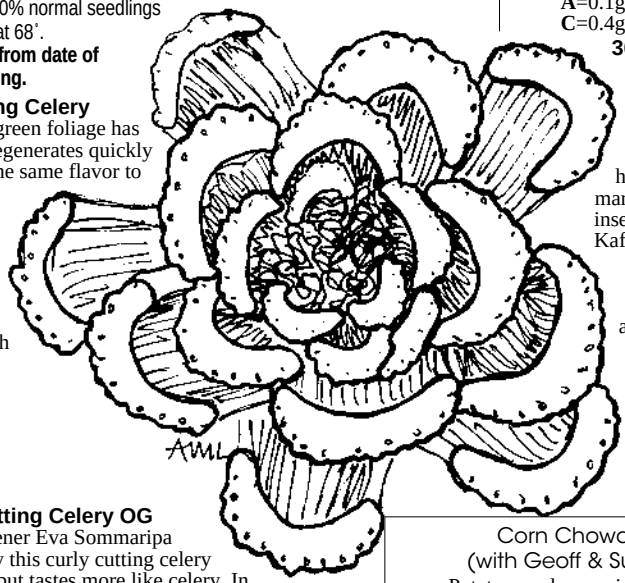
A=0.5g, $1.50 **B**=1g, $2.80 **C**=4g, $8.00 **D**=28g, $38.00

CELERY & CELERIAC *Apium graveolens*

All open-pollinated. 0.2 gram packet about 500 seeds, 0.4 gram packet about 1000 seeds, 75,000 seeds per oz. Tender, must be started indoors in March, 10–12 weeks before setting out. Slow growers require rich moist soil to survive. Celery withstands light fall frosts but gets kayoed by serious cold. Virginian Pam Dawling suggests that falling apple blossoms are a good phenological sign that transplanting time for these crops has arrived.

Minimum germination temperature 40˚, optimal range 59–70˚, ideal temperature 68˚ day, 59˚ night, needs fluctuating temperatures, emergence takes 12 days at 59˚ and 7 days at 68˚. Only 40% normal seedlings at 59˚ compared to 97% at 68˚.

Days to maturity are from date of transplanting, not seeding.

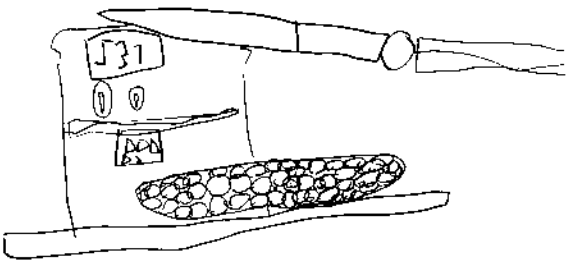


3616AF Afina Cutting Celery (60 days) Sturdy dark green foliage has rich aroma and taste, regenerates quickly after cutting. Imparts the same flavor to stews and soups as conventional celery. Although its culture is the same, it is much hardier and easier to grow. Both its thin hollow stems and its leaves can be used fresh or dried. Grows up to 30". ④

A=0.2g, $1.00
B=0.4g, $1.80
C=1g, $3.20
D=4g, $5.50
E=28g, $16.00

3621PO Par-Cel Cutting Celery OG (72 days) Market gardener Eva Sommaripa suggested that we carry this curly cutting celery that looks like parsley but tastes more like celery. In several outdoor trials we've found it a fussy germinator, so we recommend an indoor start. Although it withstands heat and drought, Par-Cel is remarkably cold-tolerant, lasting well into late fall, and tremendously vigorous once established. Cut leaves back once the roots are well-established. Older leaves develop a very strong flavor. BSO-certified. ①

A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $4.50
D=4g, $10.00 **E**=28g, $30.00

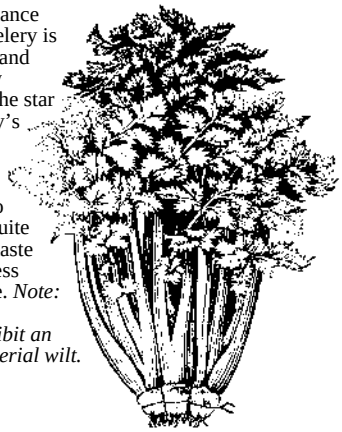


3624VO Ventura OG/BD (80 days) Ventura takes the difficulty out of growing celery. "Vigorous growth, good taste, very little punkiness in the center," praises Nicolas Panojiris. Develops beautiful thick crisp stalks with rich never harsh flavor even in less than ideal conditions. Be sure young plants receive adequate moisture, a necessity for steady growth. Irrigate if necessary. Some tolerance to fusarium. Certified biodynamic, Stellar NOP-certified. ②

A=0.1g, $2.20 **B**=0.2g, $4.00 **C**=0.4g, $7.00 **D**=2g, $20.00
E=10g, $88.00

3630RO Redventure OG (84 days) An inspired cross of Giant Red Celery and Ventura made by Frank Morton in the early 1990s, now a stabilized cultivar. This marriage of opposites brings out the best of both partners and hides the flaws. Wanting to offer red celery, we trialed heirloom Giant Red but found it tough, stringy and too strong for modern palates. However, when combined with Ventura, the harshness and textural flaws disappeared into a delicious chewy stem with plenty of interior red color. Not as tender as Ventura, but with an enhanced flavor that will really enliven soups, salads and casseroles. OT-certified. ①

A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=4g, $6.50
E=28g, $24.00



3634TO Tango OG (90 days) The dance originated in South America but the celery is from Bejo in Holland. Adam Tomash and June Zellers, who year after year grow astounding celery, selected Tango as the star of one trial. Impressed with the variety's compact architecture and absence of punky centers, they grew unbelievably massive dense plants even in close spacing. They say Tango is almost as nice as Ventura without quite as good disease resistance. Once you taste its smooth tender sweet nearly stringless stalks, you're going to want this dance. *Note: Under conditions of fast growth, high temperatures and moisture it may exhibit an harmless condition that mimics a bacterial wilt.* OT-certified. ④

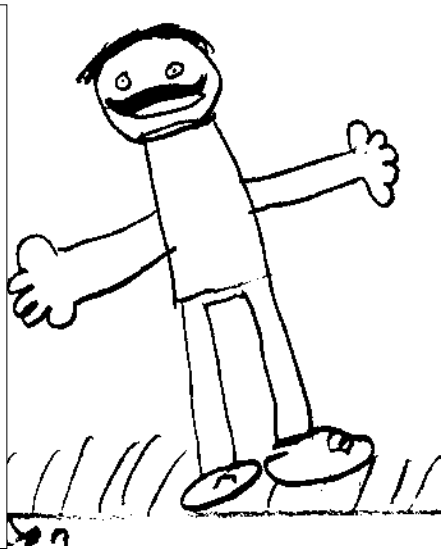
A=0.1g, $2.70 **B**=0.2g, $5.20
C=0.4g, $10.00 **D**=2g, $33.00

3645BC Brilliant Celeriac (100 days) *A. g.* var. *rapaceum* Celeriac, the frog prince of root vegetables, likes rainy years. A staple in central and eastern Europe, now becoming more popular in the States despite its ugly exterior. Recently it has been embraced by chefs, gourmets and foodies. Even though it is not a celebrated part of Downeast cuisine, Jason Kafka planted a half acre this year, setting in 7,000 plants. Kafka considers it a good market crop that requires little maintenance and seldom is bothered by insects or wildlife. Since most of the root grows hidden below ground, Kafka enjoys the "gambler's thrill" of pulling them out at harvest time to see how they did. "This year's been nice; they never lacked for moisture." Its nutty parsley-celery flavor, improved by light fall frosts, enhances meat, fish and poultry. Great raw for winter slaws and salads, it may be boiled, mashed or braised. Brilliant is a classy early celeriac, high yielding with relatively smooth roots, clean white internal coloration and superb eating quality. An early start indoors is essential for good yields. Can be stored up to six months in moist sand in the root cellar. Kafka aims for softball-size, but anything at least tennis ball-size is marketable. ④

A=0.2g, $4.00 **B**=0.4g, $7.80 **C**=1g, $19.00
D=4g, $72.00 **E**=12g, $210.00

Corn Chowder
(with Geoff & Susan)

Potatoes, celery, onions, corn
Add some milk
A chowder's born
Fill the bowls, and again,
Bread and butter, salad, then
Blueberries, ice cream,
Offers of tea.
Longer talk on poetry
On to art, parent's paintings
Art exhibits, places to visit.
Plus the usual farming news
Weather's dry; garden's ready
Neighbor misses it, returns daily.
Food for home? Yes.
Food for sales? Not now.
New young oxen, Ferguson and Spike,
Tales about breeding mixing
with politics
Back to school news (kids are there)
Three hours in a flash
Come back home
Straight to sleep.



EGGPLANT *Solanum melongena*

0.2 gram packet about 48 seeds, 0.4 gram packet about 96 seeds. Despite some help from global warming, growing eggplant remains a challenge. We recommend raised beds, row covers (**9101**) and plastic (**9091**) or IRT mulch (**9096**). Our selections, including two new ones, are the most reliable producers we've found. Even our skilled trialers get only sparse production of ripe fruits some seasons.

Minimum germination temperature is 60˚, optimal range 75–90˚, optimal temperature 85˚. Some varieties require fluctuating day and night temperatures. Emergence is 13 days at 68˚, 8 days at 77˚ and only 5 days at 86˚. Only 21% normal seedlings at 68˚, compared to 60% normal at 86˚. **Days to maturity are from date of transplanting, not seeding.**

3666SW Swallow (51 days) F-1 hybrid. The one eggplant to grow if you live in a cold part of the world. "Incredibly, my Swallow eggplants have produced here at 60˚ N. latitude. They are in a cold frame on the south side of a greenhouse and have scrap foam under the soil/compost mix…I've had many delicious eggplant dishes—well worth the extra climate modifications," reports Sally Boisvert of Four Winds Farm, Haines, AK. For *early* production of glossy purple-black tender fruit of the elongated (1¾x7") Asian type without the bitterness often associated with larger eggplants, Swallow this! ⑤

A=0.2g, $1.90 **B**=0.4g, $3.20 **C**=1g, $7.00 **D**=4g, $25.00 **E**=28g, $120.00

3673PL Pingtung Long (58 days) F-1 hybrid. A long Chinese eggplant named for a town in Taiwan. Great for cooks who prefer to work with uniform slices. Vigorous stress-tolerant plants start producing early for a decent overall yield. Its light purple color is especially attractive if it is harvested before full maturity. As it approaches its full 11", its skin darkens but retains a pleasing sheen. Its sweetness will keep you coming back for more. ③

A=0.2g, $1.10 **B**=0.4g, $2.00 **C**=1g, $3.20 **D**=4g, $4.50 **E**=28g, $18.00

3678AO Applegreen OG (70 days) Open-pollinated. Developed in 1964 for short-season areas by legendary University of New Hampshire plant breeder Elwyn Meader. This rounded 6x4½" light apple-green eggplant is early and productive—a winning combination for eggplant aficionados in the North. Chinese Red (*S. integrifolium)* is in the parentage. Fruits weigh 4–5 oz. Non-bitter, tender and flavorful mild white flesh. Bon appetit! All seed is held over with 91% germ. IA-certified. ②

A=0.2g, $1.70 **B**=0.4g, $3.00 **C**=1g, $6.50 **D**=4g, $15.00 **E**=28g, $90.00

3680GA Galine (72 days) F-1 hybrid. A classic early bell-shaped Italian-style eggplant that sets fruit and produces early and dependably in the North! Adam Tomash and June Zellers rated it the earliest in their trials, and almost on a par with #**3691** Rosa Bianca, their favorite, for flavor. "Mild with a pudding-like texture when cooked," they report. Plus it had larger fruit, averaging about 1 lb each, and was less fussy than Rosa. ⑤

A=0.2g, $1.70 **B**=0.4g, $3.00 **C**=1g, $4.50 **D**=4g, $13.00 **E**=28g, $65.00 **K**=112g, $250.00

3681LG Lucky Green (75 days) F-1 hybrid. As our seasons lengthen, our line of eggplant cultivars grows and your chances of getting Lucky improve. These skinny elongated slightly curved light green fruits began ripening in Zone 4 Hartland, ME, on Sept. 1 and were still coming on Oct. 16. Donna started them March 29 but didn't transplant them until the real heat of June 25. The semi-tall spreading plants become especially decorative when their purple blossoms commingle with their colorful fruits, called *brinjals* in Singapore. Each yielded 2–3 fruits averaging 200g. These had the best texture of any in her trial, a pleasing chewy skin with an engaging sweetness *sans* bitterness. **NEW!** ⑤

A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.20 **D**=4g, $5.50 **E**=28g, $25.00

3682PW Pure White (75 days) F-1 hybrid. Asian white eggplant has been heretofore absent from our catalog. Pure White's elongated egg-shaped fruits exemplify how the French *aubergine* got its English name. Taste testers prized its "creamy nice texture," "good mild flavor," with "slight non-bitter aftertaste," "moderately chewy skin" and sweetness. Same maturity as #**3681**, same production persistence in this most mellow autumn. **NEW!** ③

A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.20 **D**=4g, $5.50 **E**=28g, $25.00

Diamond (78 days) Open-pollinated. Kent Whealy brought this elongated slightly tapered dark purple eggplant back from the Ukraine in 1993. 2' plants set 2½x7" slender 12 oz fruits in clusters. Firm flesh has good texture and entirely lacks that bitter eggplant taste. Because of its mild flavor and good cold-climate adaptation, Diamond is growing in popularity. Our trialer in Maine had an average yield of 4 lb per plant.

3683DM Diamond ②

A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.20 **D**=4g, $5.50 **E**=28g, $25.00

3684DO Diamond OG CO-certified. ①

A=0.2g, $1.60 **B**=0.4g, $2.80 **C**=1g, $4.00 **D**=4g, $7.50 **E**=28g, $40.00

3685BK Black King (79 days) F-1 hybrid. A fine hybrid eggplant from Takii in Japan that looks good for the main crop. A vigorous grower and high yielder suitable for both greenhouse and open-field cultivation. Black King plants were "enormous for the low amount of nitrogen in their bed: waist high early in the season and very productive…liked the flavor almost as much as Applegreen," said Brenin Wertz-Roth. 7" shiny bulging oval fruits outperformed Diamond in Adam Tomash and June Zellers' trial. Their two King plants produced 11 ripe fruit averaging 0.9 lb. Resistant to excess heat. ⑤

A=0.2g, $1.60 **B**=0.4g, $2.80 **C**=1g, $4.00 **D**=4g, $12.00 **E**=28g, $50.00

3688RO Rosita OG (84 days) Open-pollinated. A truly sublime eggplant, Rosita is early, productive and tasty without a hint of bitterness. These pear-shaped pink-lavender fruits with white shoulders are 6–8" long and 4–6" wide and will stand up in any Solanum beauty contest. Heirloom Rosita, brought to the States from Puerto Rico in 1979, has gained a steady following. Enjoy its sweet delicious tender white flesh. QCS-certified. ②

A=0.2g, $1.60 **B**=0.4g, $2.80 **C**=1g, $4.00 **D**=4g, $12.00 **E**=28g, $50.00

3691BO Rosa Bianca OG (88 days) Open-pollinated bicolor Italian heirloom. Alan LePage calls it "the best eggplant in the universe," with a creamy consistency and delicate flavor. Gorgeous fruits, white with lavender streaking down the side, can command a premium in gourmet markets. Rosa is plump, about 3–4" across and 5" long, narrow at the top and widening with indentations almost like folds in draped fabric. Fruits average 2 lb, max out at 4 lb, LePage's highest-yielding eggplant. Rosa needs to be coddled, particularly in the northern half of New England. Seed needs alternating temperatures to break dormancy: warm days (preferably 80s), cooler nights (around 70˚). AGRIOR, CCOF-certified. ③

A=0.2g, $1.10 **B**=0.4g, $1.80 **C**=1g, $3.20 **D**=4g, $4.80 **E**=28g, $22.00

OKRA *Abelmoschus esculentus*

2 gram packet contains about 30 seeds. Okra is very tender and requires a lot of heat. Direct seeding is marginal in our climate. We recommend starting indoors in peat pots and transplanting in 4–5 weeks, after all danger of frost has passed. **Days to maturity are from date of transplanting, not seeding.**

Minimum germination temperature 60˚, optimal range 70–90˚, optimal temperature 80˚. Emergence is 13 days at 77˚ and only 7 days at 86˚, but highest proportion of normal seedlings (92%) is at 77˚, falling off at higher temperatures.

Transplant 1' apart; do not disturb roots. Fleshy pods are best when picked young and tender, no longer than 4". They are rich in vitamin A, protein, calcium and iron and contain mucin, a digestive aid.

3695JO Cajun Jewel OG (65 days) Open-pollinated. A bayou favorite since the 1950s, Cajun Jewel adapts well to our cooler climate and produces almost as much as hybrid Cajun Delight. Dwarf spineless 3–4' plants yield relatively early 1x7" pods with good flavor. Southern Exposure Seed Exchange, who introduced this Jewel to commerce in 1989, produced our seed. Heldover seed germs at 93%. QCS-certified. ②

A=2g, $1.10 **B**=4g, $2.00 **C**=28g, $8.00 **D**=112g, $23.00 **E**=448g, $85.00

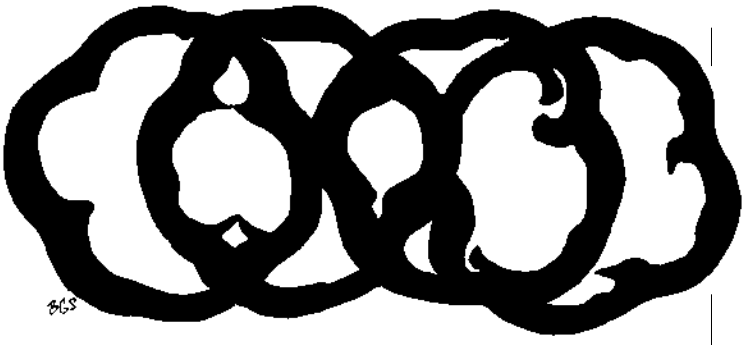
3697GO Red Burgundy OG (75 days) Open-pollinated. A dual-purpose cultivar that is a stunning ornamental as well as a culinary delight. Most productive in the south, Red Burgundy is hardy enough to generate at least a few pods here. Slender pods will grow 6–7" but are best harvested at 4" for optimal texture and flavor. Our trialer Relentless says they "taste as good as any green okra." Later and not as productive here as Cajun Jewel, but an absolute stunner with its green leaves and burgundy ribs, stems and pods. Bred by Leon Robbins at Clemson University. CCOF-certified. ③

A=2g, 90¢ **B**=4g, $1.60 **C**=28g, $3.50 **D**=112g, $12.00

3699BO Beck's Big Buck OG (85 days) Open-pollinated. When Malcolm and Delphine Beck bought their farm in 1968 in Comal County, TX, they found in the abandoned garden giant okra stalks with the fattest pods they'd ever seen. When they saved and replanted the seed it grew big fluted remarkably tender delicious green pods in abundance on sturdy plants. They called it the snapping okra because it snaps so easily off the plants when it is ready to harvest. Though not adapted to our climate, Beck's will produce even in Central Maine in an average growing season. Of course, it will do much better farther south. Heldover seed tested at 92%. QCS-certified. ②

A=2g, $1.20 **B**=4g, $2.00 **C**=28g, $8.00 **D**=112g, $28.00

Pest: Colorado Potato Beetle
Cultural controls: rotation, control solanaceous weeds such as horse nettle, rapid flaming, suction devices, hand-picking if pressure is low, mulch before adults arrive.
Materials: Spinosad (**8922-4**)
Also see the Moose Tubers section, page 111.



PEPPERS *Capsicum annuum*

Capsicum comes from the Greek *kapto* which means 'bite.' **~160 seeds/g.**

Very tender, will not tolerate frost, dislike wind, will not set fruit in cold or extremely hot temperatures or in drought conditions. Start indoors in March or April. Set out in June. Black plastic highly recommended. Row cover improves fruit set in windy spots. Minimum germination soil temperature 60˚, optimal range 68-95˚, optimal temperature 80˚. Emergence is 13 days at 68˚, only 8 days at 77 or 86˚. 70% normal seedlings at 59˚ increases to 98% at 77˚.

Pick first green peppers when they reach full size to increase total yield significantly. Green peppers, though edible, are not ripe. Peppers ripen to red, yellow, orange, etc.

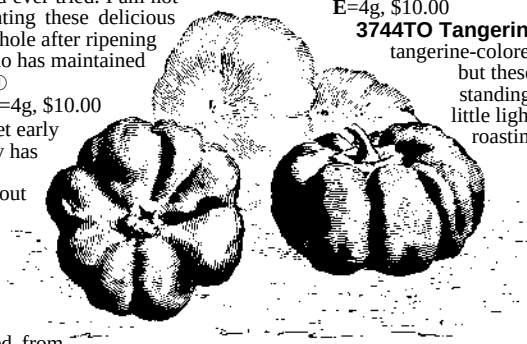
For all peppers, days to full-color maturity are from transplanting date.

Open-pollinated SWEET PEPPERS

3703KO Klari Baby Cheese OG (65 days) Finally, our first decent crop since 2010. Also known as Golden Delicious Apple Pepper. From Hungary, a Fedco introduction to the U.S. Wini Noyes says a good choice "for the pepper-challenged" to grow. Cheese peppers are flattened and filled with a soft sweet mild core. Shaped like 3" Rouge Vif d'Étampes pumpkins, the squat thick-walled 4 oz fruits were unlike anything we'd ever tried. I am not a wild-eyed pepper aficionado, but I couldn't stop eating these delicious summertime treats raw. Traditionally they are pickled whole after ripening from white to yellow to red. Named after the woman who has maintained this heirloom seed stock. ☙1997. MOFGA-certified. ①

A=0.5g, $2.00 **B**=1g, $3.60 **C**=2g, $6.00 **D**=4g, $10.00

3704PO Peacework OG (65 days) This exciting sweet early red bell pepper bred by Molly Jahn and George Moriarty has King of the North and Early Red Sweet in its parentage. Each small plant in our observation plot vine-ripened about six medium-thick-walled peppers with good flavor and full-bodied sweetness. A product of farmer-breeder collaboration starring CSA-grower Elizabeth Henderson and her team at Peacework Farm in cooperation with the Organic Seed Partnership, the California Pepper Commission and university breeders, Peacework is a stabilized open-pollinated variety. Seed from this variety is sold under license and a portion of the proceeds go to support public vegetable breeding at Cornell University. Susceptible to sunscald because plants have limited canopies. Seed, on a two-year production cycle, is held over, tested at 88%. ☙2008. QCS-certified. ①



A=0.2g, $1.50 **B**=0.4g, $2.50 **C**=1g, $4.50 **D**=2g, $8.00
E=4g, $15.00

3706NO King of the North OG (70 days) Back in the late '80s when Seed Savers Exchange co-founder Kent Whealy keynoted at the Common Ground Fair we asked him to suggest a pepper that would ripen in the North. His suggestion was King and it has been our most popular open-pollinated bell ever since. A good choice for those who want early marketable blocky peppers. Prone to blossom-drop in heat. CO-certified. ①

A=0.2g, $1.20 **B**=0.4g, $1.80 **C**=1g, $3.00 **D**=2g , $5.50
E=4g, $10.00

3715BO Boldog Hungarian Spice Paprika OG (71 days) The Boldog from Hungary that doesn't bite but does dry nicely with a hint of spiciness. A prolific bearer of 4-6" long wrinkled tapered pendant fruits. Pick red and grind into sweet paprika, string into decorative ristras or enjoy fresh. Boldog sets enough fruit to accommodate all three uses. The town of Boldog is in a well-known spice-pepper district northeast of Budapest. WA-certified. ①

A=0.2g, $1.30 **B**=0.4g, $1.90 **C**=1g, $3.20 **D**=2g, $6.20
E=4g, $12.00

3723PO Purple Beauty OG (74 days) Produces a good yield of blocky 3x3" fruits that ripen from purple to green to deep red as they mature. Aptly named, the fruits are incredibly striking in the purple stage. They taste like other crisp green bells, but sell much better even at a premium price. Purple peppers reveal green interiors when sliced, and turn green in their entirety when cooked. "Super early and they're huge," says Holli Cederholm. Trialers noted that this organic production was loaded with peppers while the plants from conventionally grown seed were not. Grows 18–20". ID-certified. ①

A=0.5g, $1.10 **B**=1g, $1.90 **C**=2g, $3.00 **D**=4g, $5.00
E=28g, $20.00

Staddon's Select OG (74 days) No crop. *Not available in 2014.*

3731JO Jimmy Nardello's (76 days) This thin-walled 8" frying pepper has won many converts. The long curved tapering pointed fruits turn deep red with shiny wrinkled skin when ripe. Pleasing sweet mild flavor, good raw, in stir-fries and, especially, fried. According to Nardello family relative Patty Ruprecht of Pownal, ME, "the *only* way to eat them is to string them, dry them, fry them and salt them." Eat them plain or "better still as a sandwich on Italian bread with a slice of provolone." Listed on Slow Food's Ark of Taste. Brought to Connecticut from the village of Ruoti in the Basilicata region of southern Italy in 1887 by Jimmy Nardello's mother. "The Jimmy Nardello pepper…is even liked by people who dislike peppers. They are always a hit," avers John Rab. MOFGA, OT-certified. ①

A=0.2g, $1.70 **B**=0.4g, $3.00 **C**=1g, $5.50 **D**=2g, $9.50
E=4g, $15.00

3735CO Chocolate OG (80 days) Our warehouse crew is indiscriminate and voracious when it comes to chocolate. But our trial evaluators were much more circumspect, rejecting various strains of chocolate peppers as far too unproductive until we found this chocolate. Our seed grower reports every plant has at least a dozen fruits, some 20 or 30, so that sometimes plants fall over! 4–6" tapered fruits turn from green to glossy brown. The thick-walled flesh (burgundy-red inside, chocolate outside) has the taste we sought for so long. Seed is held over at 94% germ. MOFGA-certified. ①

A=0.2g, $1.80 **B**=0.4g, $3.30 **C**=1g, $6.00 **D**=2g, $10.00
E=4g, $18.00

3738CU Cubanelle (80 days) Our customers asked for this semi-sweet frying pepper. 6x2" waxy yellow-green fruits turn red. Not pungent. "Hands down our biggest fruit producer of all pepper varieties for many years now," reports Anne Elder. ②

A=0.5g, 80¢ **B**=1g, $1.20 **C**=2g, $2.20 **D**=4g, $3.50
E=28g, $6.00

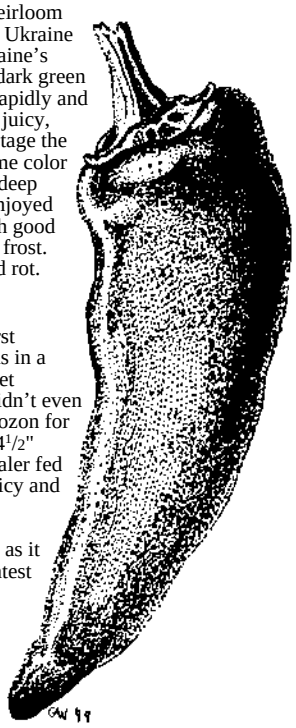
3740SP Sweet Pimiento ECO (80 days) A close substitute for Amish Pimiento, grown in the North Carolina mountains. Early and productive with an enjoyable rich fruity taste, it matured before Amish in our lot growout. Though not noted for my prowess with peppers, I harvested several of these red pimientos in a difficult season. More skilled growers report 15–20 peppers per plant. Early and prolific even in bad years. ① **BACK!**

A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.50 **D**=2g, $5.50
E=4g, $10.00

3744TO Tangerine Pimiento OG (85 days) They may not be tangerine-colored any more (closer to yellow in recent years) but these beautiful pimientos remain a joy to harvest, standing out, in the words of one customer, "just like little lights." Sweet and juicy, great for eating fresh or roasting. Plants are modest in height and bushy, yet capable of ripening more than a dozen small 2–3" round to slightly flattened 3–4 lobed thick-walled squat fruits in a good year. "They might have a small body, but they carry a big pizazz," opines Anne Elder. No new crop; heldover seed tests at 87%. OEFFA-certified. ①

A=0.2g, $1.40 **B**=0.4g, $2.50
C=1g, $4.00 **D**=2g, $6.00

3745DM Odessa Market (87 days) An heirloom pepper from Odessa on the Black Sea in the Ukraine whose attributes translate wonderfully to Maine's Zone 4. Its strong stocky stems and unique dark green leaves set it apart at seedling stage. Grows rapidly and dependably sets 7–12 fruits per plant, crisp, juicy, thick-walled and tasty. At the edible green stage the $2^1/_4$x$4^1/_2$" tapered peppers have a distinct lime color that rapidly morphs to orange and then to a deep dark red. Sweet and full-textured whether enjoyed raw, sauteed or roasted. Broad canopies with good leaf cover reduce sunscald and protect from frost. Fruits are remarkably free from blossom end rot. Short crop; *order early.* ①

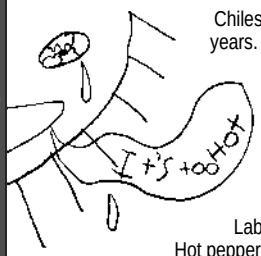


A=0.2g, $1.50

3746FO Feherozon OG (90 days) My first introduction to this extraordinary pepper was in a jar…dried and ground to a wonderfully sweet paprika. I was intrigued. The field reports didn't even consider this aspect, instead extolling Feherozon for incredible productivity: up to two dozen 3x$4^1/_2$" pointed light yellow fruits per plant. One trialer fed her entire neighborhood with these sweet juicy and flavorful peppers. Any not eaten fresh will eventually turn red and can be dried for a delicious paprika. The beauty of this pepper as it turns is noteworthy. Beginning with the faintest red overtones blending into its yellow background, the red blush grows more pronounced as it matures. Jill Breen de Bethune exhibited some lovely ones at the 2013 CGCF. ID-certified. ①

A=0.2g, $1.40 **B**=0.4g, $2.50
C=1g, $4.00 **D**=2g, $6.00
E=4g, $10.00

Open-pollinated HOT PEPPERS



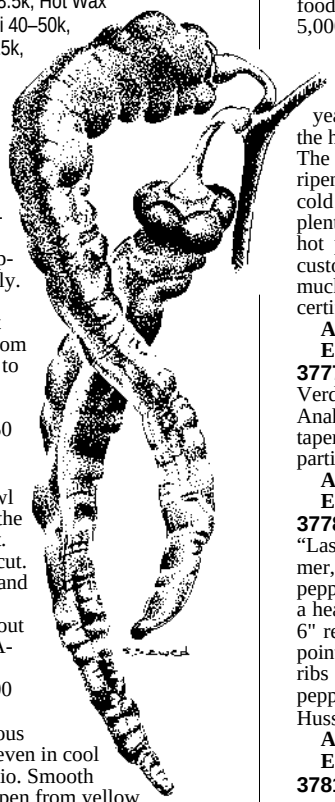
Chiles have been consumed in Mexico for more than 5,000 years. The Aztecs had at least seven different words for hot peppers and the Incas used them as a form of currency. In the U.S. hot peppers have increased dramatically in popularity. Per capita consumption of chiles now exceeds that of peas, asparagus and cauliflower. 25% of the U.S. chiles are grown in Hatch, NM, the self-proclaimed Chile Capital of the world, which celebrates an annual chile festival each Labor Day weekend.

Hot pepper eaters enjoy the "constrained risk" of a pleasant thrill which, unlike alcohol, tobacco or coffee addictions, has only a short-term effect and is not health-threatening. A great website if you like your peppers hot is www.usHOTstuff.com.

Capsaicin compounds cause most of the heat in peppers. Warm nighttime temperatures stimulate maximum development of capsaicins and increase pungency levels. Pungency is expressed in Scoville units, after Wilbur Scoville, an Englishman who devised the method used for eighty years to measure the heat in peppers.

Some Scoville ratings for general categories are: sweet bell, Banana and Pimiento peppers 0, Ancho & Poblano 1–2k, Anaheim 0.5–2.5k, Bulgarian Carrot 2.5k, Jalapeño 2.5–8k, Chipotle 5–8k, Long thick Cayenne 6–8.5k, Hot Wax 5–9k, Serrano 8–22k, Aji & Cayenne 30–50k, Super Chili 40–50k, Thai 50–100k, Orange Habanero/Scotch Bonnet 150–325k, commercially available pepper spray for self-defense 2–3M, police-grade spray 5.3M, capsaicin 15–16M.

If you overdose on hot peppers, milk is almost twice as effective as water in banking the flames, and bread, rice or tortillas are even better. Handle hot peppers with caution; capsaicin is highly alkaloid and can burn skin.



3751PO Hot Portugal OG (64 days) Bears elongated narrow fruits, 5–8" long, 1" in diameter with the classic wrinkled hip at the stem end. Superb pepper flavor comes through its considerable heat nicely. Not as hot as Super Chili, but hotter than Early Jalapeño. Early productive ripener of glossy scarlet fruits borne on tall plants. Most will turn straight from green to red, but 4% off-types will turn from green to yellow to red. Offered by Joseph Harris in 1935. MOFGA-certified. ①

A=0.2g, $1.90 **B**=0.4g, $3.60 **C**=1g, $6.50 **D**=2g, $11.00

3753BO Czech Black OG (65 days) Fruits so striking that seed grower Roberta Bailey kept a bowl on her table just to admire. Black when immature, the 2½" long conical peppers ripen to a lustrous garnet. Mild juicy flesh runs with a cherry red juice when cut. The heat, a tad less than a jalapeño's, is in the ribs and seeds and is "just right for many of us," says one customer. 2½–3' bushes bear very early, setting about 20 pointed thick-walled peppers per plant. MOFGA-certified. ①

A=0.2g, $1.70 **B**=0.4g, $3.20 **C**=1g, $6.00 **D**=2g, $10.00 **E**=4g, $17.00

3754HH Hungarian Hot Wax (68 days) Numerous customers requested this semi-hot type which sets even in cool weather yet loved the hot 2012 summer even in Ohio. Smooth waxy yellow 5½x1½" fruits taper to a point and ripen from yellow to orange to red. Pickle all three colors for a beautiful hot-pepper medley—a staple for winter sandwiches. Nikos' favorite for chiles rellenos. Janine Welsby used them to make three batches of her famous pepper butter. Originated in Hungary, 1941. 700 to 3,000 Scovilles. *We received reports of seed not-true-to-type.* If you got light green Cubanelle-like fruits with no spiciness, include a note with your order for a free replacement or refund. ②

A=0.5g, 80¢ **B**=1g, $1.20 **C**=2g, $2.20 **D**=4g, $3.50 **E**=28g, $6.50

Ho Chi Minh ECO (68 days) Ho, Ho, Ho Chi Minh is taking a year off. *Not available in 2014.*

3756BC Bulgarian Carrot Chile (68 days) Also known as Shipkas. We first saw this show-stopper at Amy LeBlanc's farm. Colored like a polished fluorescent-orange carrot, the thin-walled 1½–3½" tapered fruits are as hot as they look and make welcome additions to chutneys, marinades and salsas, as well as excellent hot sauces. Also delicious dried and ground. Their fruity undertone nicely complements their heat. Just 18" tall, these plants bear clusters of peppers close to the main stem. Brought indoors, they produced in Amy's greenhouse till February. Heirloom was smuggled here through the Iron Curtain more than 30 years ago. ③

A=0.5g, $1.50 **B**=1g, $2.70 **C**=2g, $5.00 **D**=4g, $9.00 **E**=28g, $36.00

3761JV Jaluv An Attitude ECO (75 days) This coup by amateur breeder Relentless has at least three kinds of peppers in its pedigree, although it looks like a jalapeño in both shape and size. In the breeder's own words: "If I had to have one chili on a desert island, it used to be a jalapeño. Now maybe not. This new chili is the result of a cross between an open-pollinated jalapeño and (my own) original that was called 45˚ N Attitude. The object was to have a thicker-skinned 45˚ with a lot of jalapeño flavor. The 45˚ N had thin skin, delicious hot fruity flavor, and dried and produced well in northern latitudes. My overriding intent in crossing them was to obtain the best combination of both." Earth Passionate Agrarian™–grown. Got attitude? ☙2008. ①

A=0.2g, $1.70 **B**=0.4g, $3.20 **C**=1g, $6.00 **D**=2g, $10.00 **E**=4g, $17.00

3764EJ Early Jalapeño (75 days) Hot, hot, 3x1" sausage-shaped blunt fruits mature early. Characteristic brown netting appears as fruit ripens from dark green to dark red. Packing the seed makes us teary-eyed! 4,000 to 6,500 Scoville units at maturity. From Jalapa in the state of Veracruz, Mexico. ②

A=0.5g, 80¢ **B**=1g, $1.20 **C**=2g, $2.20 **D**=4g, $3.50 **E**=28g, $6.50

3770CY Long Red Narrow Cayenne (75 days) Often curled and twisted, the wrinkled peppers grow 5–6" long, ½" across, and taper to a point. Dark green color changes to bright red. Prolific ("produce zillions") and hot. The backbone of Hillary Nelson's red chile pastes. Along with #**3773** Matchbox dries easily on screens; Holli Cederholm blends them in a food processor for crushed red pepper. Pre-1827 heirloom. Pungent; 3,500 to 5,000 Scovilles. ②

A=0.5g, 80¢ **B**=1g, $1.20 **C**=2g, $2.20 **D**=4g, $3.50 **E**=28g, $6.50

3773MO Matchbox OG (75 days) Matchbox is a product of many years of dedicated breeding work to create an open-pollinated selection of the hybrid Super Chili. Parents include Hungarian Hot Wax and Hot Banana. The squat plants bear prolific upright fruit, averaging 2" long, ⅓" across and ripening from pale green to deep scarlet. Like Super Chili, they bear well in cold damp weather, hot dry weather, sandy soils and heavy clay. They have plenty of heat and the characteristic finely cut lightweight leaves of many hot peppers. Can be potted and overwintered. Now fully stable. As one customer put it, "All of my Matchboxes were extremely stable, infinitely much more so than me." 30,000-50,000 Scoville units. ☙2000. MOFGA-certified. ①

A=0.2g, $1.70 **B**=0.4g, $3.20 **C**=1g, $6.00 **D**=2g, $10.00 **E**=4g, $17.00

3777AN Anaheim (78 days) Also known as California Chile and Chile Verde. Cultivated for canning in a factory near Anaheim around 1900. Anaheim is the pepper typically used for chiles rellenos. 7" long fruits tapering to a point turn from dark green to red at maturity. Pungent, but not particularly hot. 900 to 2,500 Scovilles. ②

A=0.5g, 80¢ **B**=1g, $1.20 **C**=2g, $2.20 **D**=4g, $3.50 **E**=28g, $6.50

3778BD Beaver Dam (80 days) Karen Pratt of Jacksonville, VT, relates, "Last year (2011) I tried Beaver Dam…In spite of a miserable rainy summer, not only did they produce lots of peppers, they were quite large for hot peppers, though…seemed to take forever…to turn red." Early for its size and a heavy producer in normal years, sets several pendulous shiny horn-shaped 6" red-orange fruits per plant, 3" wide at the shoulders, tapering to a blunt point. Both sweet and with heat. Most of its mild spice is in its seeds and ribs so you can excise those if you wish. Or leave them in to enjoy its nice peppery flavor. Heirloom brought to Beaver Dam, WI, in 1912 by the Joe Hussli family. ①②

A=0.2g, $1.40 **B**=0.4g, $2.50 **C**=1g, $4.00 **D**=2g, $6.00 **E**=4g, $11.00

3781FO Fish OG (80 days) A most attractive pepper plant with distinctive green and white mottled foliage and striped fruits. The 2" curving pendant fruits look a little like swimming fish. They turn from white with green stripes to orange with brown stripes to red, packing considerable heat and full-bodied flavor that especially enhances shellfish. A mutation of a common serrano pepper that probably originated in the 1870s, by 1900 Fish was extensively grown by the African-American community around Philadelphia and Baltimore. Listed on Slow Food's Ark of Taste. 2' spreading bush plants benefit from staking. *May require a little too long season for the coldest pockets.* Occasional plants will regress to solid green leaves. Rogue out if you are saving seed. Fish crosses readily with other peppers, requiring greater populations and more isolation than most others to remain pure. OEFFA-certified. ①

A=0.2g, $1.40 **B**=0.4g, $2.50 **C**=1g, $4.80 **D**=2g, $7.50 **E**=4g, $14.00 **K**=14g, $36.00

3783TO Thai Hot OG (82 days) Anne Elder gets 200 of these little "sweeties" per plant, "cute little compact treasures full of heat." Thai Hot checks in around 80,000 Scoville units, topped only by #**3796** Habanero, and possibly #**3794** Hinkelhatz in our selection. Thai Hot's small conical peppers ripen to bright red and stand erect above the foliage so fetchingly that it's grown "in the trade" as a red and green Christmas potted plant. However, devotees of hot cuisine prize its sparks. Early pinching will produce a bushy 8" plant that can be pulled, roots and all, and hung to dry for winter use or grown inside for ornamental and edible enjoyment. MOFGA-certified. ①

A=0.2g, $1.80 **B**=0.4g, $3.20 **C**=1g, $5.50 **D**=2g, $9.00 **E**=4g, $17.00

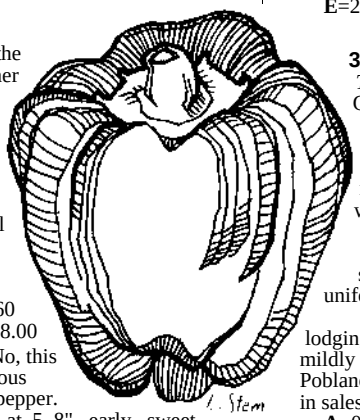
3794HO Hinkelhatz OG (88 days) Not for the chicken-hearted, this rare Pennsylvania Dutch heirloom packs considerable heat. Its name aptly describes the size and shape of its ¾x1½" pendant peppers that taper to a blunt point and are covered with tiny bumps and wrinkles. Ripening from green to red, the tough skins when cut open emit a fruity redolence and reveal a thick juicy flesh. Rarely eaten raw, the peppers were traditionally used for pickling and making pepper vinegar. Nearly as hot as habaneros, they do not require quite as long a season, nor are they as picky in cool environments. Plus they are compact enough to grow in a pot to bring inside for the winter. Hinkelhatz recently boarded the Slow Food's Ark of Taste. Thank you, Amy LeBlanc, for bringing it to our attention. Heldover seed at a robust 97% germ. MOFGA-certified. ①
A=0.2g, $1.80 **B**=0.4g, $3.20 **C**=1g, $6.00 **D**=2g, $10.00
E=4g, $18.00

3795DO Hidalgo Serrano OG (90 days) Grower Ben Whatley of Topsham, ME, states, "Hidalgo has a bright, fruity hot flavor which lingers in the front of the mouth and makes your taste buds tingle all over." Slightly hotter than a Jalapeno, with from 6,000–17,000 Scoville units. Extremely prolific 3–3½' plants yield dozens of light green fruits that ripen to bright scarlet. The 2½–3 x ½" fruits, as fat as your ring finger but only as long as your pinky, have thin walls, a long seed cavity and classic serrano heat. They are perfect for fresh salsa and pickling or homemade hot sauces. Ben's dad uses a lot of them in his Captain Insano's Hot Sauce. All seed is held over, germs at 92%. MOFGA-certified. ①
A=0.2g, $1.40 **B**=0.4g, $2.50 **C**=1g, $4.00 **D**=2g, $7.00
E=4g, $12.00

3796HB Habanero (90 days) *C. frutescens* The name means 'from Havana,' although they really are from other parts of Cuba and the Yucatan. A Scotch Bonnet–type, Habanero is one of the most fiery peppers, registering a blistering 200,000–325,000 Scoville units, depending on how hot the growing season, from 30–80 times as hot as Early Jalapeño. Each 1½' plant will set 10–20 pendulous fruits that turn from dark green to tangerine as they mature. Fruits are somewhat wrinkled from stem to tip. Their distinctive flavor makes them a key ingredient in West Indian jerk sauce. We recommend greenhouse culture for the northern third of our sales area where frequent nighttime temperatures below 70˚ make outdoor production iffy. ②
A=0.5g, $1.00 **B**=1g, $1.80 **C**=2g, $2.80 **D**=4g, $4.50
E=28g, $22.00

3797SH Some Like it Hot Mix (64-90 days) Love hot peppers but lack the space to try separate packets of each? Try our blend of 5–7 different kinds all in one packet. We'll mix colors, shapes and flavors.
A=0.2g, $1.60 **B**=0.4g, $3.00 **C**=1g, $5.60 **D**=2g, $9.00
E=4g, $16.00

Hybrid SWEET PEPPERS



3810AC New Ace (60 days) A cinch to grow in the North. Resists blossom drop even in adverse weather so that almost every flower produces. Fruits thin-walled, not blocky, turn red early, good for the home garden. New Ace is an improvement on the old strain, producing fewer misshapen pointy peppers, but still not a majority of classic blocky 4-lobed commercial peppers. Janine Welsby responds, "Don't damn them with faint praise! Still the only pepper that consistently ripens gorgeous red bells for us. Maybe they are kind of misshapen but the taste makes up for it." ⑤
A=0.2g, $1.60 **B**=0.4g, $3.00 **C**=1g, $5.60
D=2g, $10.00 **E**=4g, $19.00 **K**=14g, $58.00

3825BS Superette Sweet Banana (65 days) No, this is not a chain of supermarkets owned by the infamous United Fruit Corporation, but is a favorite banana pepper. Nor is this a chiquita pepper, being quite long at 5–8", early, sweet, continuously setting and productive. Roughly the shape and color of a banana, but slightly curved and shinier yellow. Maybe even as sweet as bananas at perfect ripeness, great for eating out of hand or pickling. May display some genetic variability. All seed is held over, 97% germ. *This is our last year to offer* as we have a replacement hanging in the trees. ②
A=0.1g, $1.80 **B**=0.2g, $3.40 **C**=0.4g, $5.60 **D**=1g, $12.00
E=2g, $20.00 **K**=8g, $65.00

3826GO Gilboa OG (66 days) Fills the need in our selection for a blocky orange bell pepper, missing since we lost Valencia after 2011. Gilboa is loaded with thick-walled crunchy squat bells, as many as a dozen per plant, with an engaging fruity flavor. Donna Dyrek started harvesting ripe ones as early as mid-August. Early, and organic, too. AGRIOR-certified. ③ **NEW!**
A=0.1g, $1.30 **B**=0.2g, $2.40 **C**=0.4g, $3.40 **D**=1g, $5.00
E=2g, $8.50 **K**=8g, $30.00

3828LB Lady Bell (68 days) An early elongated bell that looked good in our trials as a replacement for North Star. 3- to 4-lobed fruits ripen from rich green to attractive bright red. A good producer of 3x5" bells, juicy and sweet with a hint of spiciness. Even in cool conditions, each plant sets 3–8 fruits. Developed by Harris. ⑤
A=0.1g, $1.80 **B**=0.2g, $3.40 **C**=0.4g, $5.60 **D**=1g, $12.00
E=2g, $20.00 **K**=8g, $60.00

3836CO Carmen OG (70 days) Johnny's Carmen debuted in 2006 to much critical acclaim, including a coveted AAS. We wouldn't be shocked if the pepper were still grown as widely in 140 years as Bizet's 1875 opera *Carmen* is performed now. A classic Italian Corno di Toro type, Carmen features unusually sweet horn-shaped tapered pointed 2½x6" fruits avg 5 oz. Great for salads and roasting, especially as they ripen from green to deep carmine, credited with good sweet flavor in 2006 OSU observations. Upright medium-sized plants with excellent protective canopy. Widely adapted and early maturing in its class. Bizet's Carmen was a beautiful gypsy with a fiery temper responsible for the downfall of many men. Rob and Janika's Carmen is equally tempting, though with much more salutary results. MOFGA-certified. ③
A=0.1g, $2.30 **B**=0.2g, $4.20 **C**=0.4g, $8.00 **D**=1g, $18.00
E=2g, $35.00 **K**=8g, $125.00

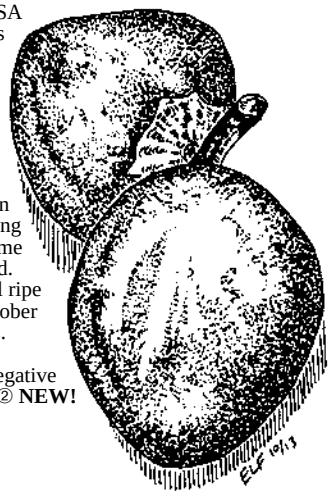
3837RV Revolution (72 days) "This is our third season growing Revolution. We may have to stop growing other green-to-red bells, as Revolution makes them look puny and we can't put them in the same basket and sell them for the same price," related Deborah Jaffe. Turned red in early October for Donna Dyrek. Juicy and delicious, it boasts the stoutest square walls imaginable. Superb yields of "nice hefty thick-walled fruits," says Jason Kafka, some in excess of l lb. Elaine Carlson relates, "I finally had success growing good sweet peppers 12–14 oz each thanks to Kafka's recommendation. No more thin-walled peppers for me." Resists BLS, tolerant to CMV. ⑤
A=0.1g, $2.30 **B**=0.2g, $4.20 **C**=0.4g, $8.00 **D**=1g, $18.00
E=2g, $35.00 **K**=8g, $125.00

3839GS Golden Star (72 days) A new color in Fedco's pepper palette, one we have been long seeking. With its large 4" 4-lobed glossy thick-walled blocky yellow peppers, this new Star will fill the gap admirably, a prolific colored Cal Wonder–type adapted to the North, even though bred in Israel. On Sept. 26 one plant sported 7 fruits, and another, 10. Our trialer describes them as "nice, sweet and crispy." Plants boast generous leaf canopies. Ripened in Zone 4 Hartland, ME, around Sept. 1. ③ **NEW!**
A=0.1g, $1.20 **B**=0.2g, $2.20 **C**=0.4g, $3.20 **D**=1g, $5.00
E=2g, $8.00 **K**=8g, $25.00

3842FB Flavorburst (75 days) Citrus flavor comes to the world of sweet peppers! A Burpee taste-test winner, the 4–6" blocky bells begin the color of Granny Smith apples and ripen to a lovely shade of goldenrod. Thick-walled, crisp and juicy, the expected peppery bite overlaid with a zesty surge of lemon. Great appetizers, salad enhancers or stuffers. Tends to wedge its fruits into the stems of the plants making it hard to harvest quickly without damaging the plant. ④
A=0.1g, $2.10 **B**=0.2g, $4.00 **C**=0.4g, $7.50 **D**=1g, $17.00
E=2g, $32.00 **K**=8g, $100.00

Hybrid HOT PEPPER

3910TB Tiburon Ancho/Poblano (65 days green, 85 days red ripe) *Tiburon* is Spanish for shark. Tiburon Island is the largest island in the Gulf of California. The channel between the mainland and the island is so treacherous that it is called the *canal del infiernillo* (hell's channel). There is no evidence that this pepper originated in Tiburon, nor does it have the bite that these associations conjure. These relatively mild hot peppers, known as Poblano when green and Ancho when dried, are used for roasting, for making chile powder and sauces, especially the classic *mole*. Also suitable for stuffing. An extremely productive selection for northern market growers or home gardeners serious about having plenty of peppers for table and processing. Large uniform glossy dark green 3-lobed horn-shaped fruits (3½–5" long x 2½" wide) mature to a deep brick red on sturdy bushy 3' plants that resist lodging and keep the heavy fruit set off the ground. The flesh is thick and mildly hot (2,000 Scoville units) with that mouth-watering distinctive Poblano flavor, sweet and savory. Made a popular 2013 debut, ranking third in sales among the new items. Resistant to BLS and TMV. ⑤
A=0.2g, $1.60 **B**=0.4g, $3.00 **C**=1g, $5.60 **D**=2g, $10.00
E=4g, $19.00 **K**=14g, $58.00



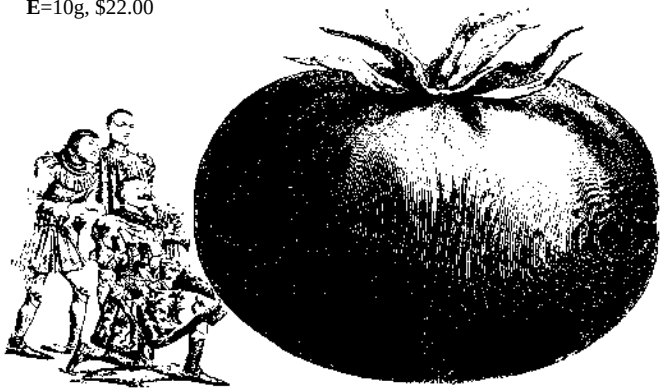
3917FB Fireball (75 days) Despite NSA spying, this form of incendiary device is still legal and much sought after. Customers have long lamented the absence of a cherry-type hot pepper in our selection. With the introduction of Fireball, we make amends. Its first impression of sweetness is swiftly followed by an expression of searing heat. Small strawberry-shaped fruits turn from shiny green to blazing red, mirroring the fire within. Like the candy of the same name, turns the inside of your mouth red. Donna's first ripened Sept. 1; additional ripe fruits followed slowly. Now in mid-October her plants are still covered with peppers. Outrageous Fireball just won't quit. 2,500-5,000 Scovilles. This lot tested negative both for TMV and BLS. Resists TMV. ② **NEW!**
A=0.1g, $2.40 **B**=0.2g, $4.50
C=0.4g, $8.50 **D**=1g, $19.00
E=2g, $35.00 **K**=8g, $125.00

3999SP Potassium Nitrate (KNO_3) Also known as saltpeter, used to soften the coat of many seeds in order to expedite germination. Recommended for brassicas, eggplant, peppers, tomatoes. basil, endive, radicchio, and most flower seed. Comes in fine granular form. Dilute 1/2 tsp in 1 quart water. Use as a pre-soak for seed or to water seedling flats. 10 gram packet contains 2 tsp. *Note: Not approved for certified-organic use.* ③
A=10g, $1.20

PHYSALIS

4008HC Husk Cherry (77 days) *P. pruinosa* Open-pollinated. A treat inside every paper wrapper! Also known as Ground Cherry. Same genus as Chinese Lantern and tomatillo, fruits ripen inside their protective husks. As clusters of berries sweeten, they turn from green to golden yellow, drop off the decorative branching plants, and reach perfection as their husks thin to a near-gossamer papery consistency. The berries have an indescribable nutty flavor, great for raw snacks. *Don't eat them green—they can be a powerful emetic*. Need filtered light and temperatures at least 75˚, preferably closer to 90˚, to germinate. Cover seeds with just a light sprinkling of soil and place the flats in the hottest part of the greenhouse, transplanting after last spring frost. Husk cherries tolerate a touch of frost but give up when temperatures dip below 30˚. In a good year, about half will ripen in time. Will readily self sow, although volunteers never mature as quickly as those started indoors. ③
A=0.5g, $1.00 **B**=1g, $1.70 **C**=2g, $2.80 **D**=4g, $4.50
E=28g, $20.00

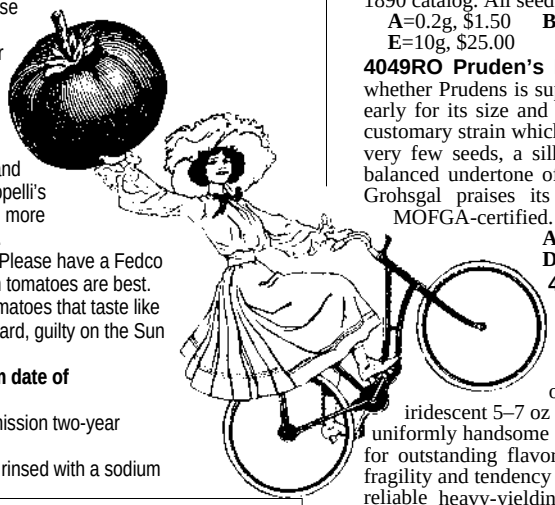
4015VO Verde Puebla Tomatillo OG (77 days) *P. ixocarpa* Open-pollinated. To make salsa verde, harvest golf-ball-sized green fruits when their papery husks split. Or allow them to turn slightly yellow for a tangy nutty raw snack. They will split before becoming fully ripe. Verde stood out as having the sweetest flesh in our trials. Plants up to 3' put out a huge crop of 1¼–2" green balls. Ready for salsa in mid-August. Seed crop was selected for beautiful big gold fruits. MOFGA-certified. ①
A=0.2g, $1.40 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00
E=10g, $22.00



TOMATOES *Lycopersicon esculentum*

9,000 seeds per oz, 0.2 gram pkt ~60 seeds, 0.5 gram pkt ~150 seeds. Tender, cannot tolerate frost. Usually started indoors Feb–April. Minimum germination soil temperature 50˚, optimal range 60–85˚, ideal temperature 77˚. Emergence takes 43 days at 50˚, 14 days at 59˚, 8 days at 68˚ and 6 days at 77˚ and 86˚. 98% normal seedlings at 59˚ but only 83% at 86˚.

Avoid using fresh manure as it causes lush foliage with few ripe fruits. Instead use generous amounts of well-rotted cow or horse manure, or compost to boost plant vigor, and crushed eggshells at the bottom of each hole for calcium. Heavy phosphorus needs. Respond well to foliar sprays.



Determinate (**Det**) bush varieties may be staked, should not be pruned. **Indeterminate** (**Ind**) climbing varieties are customarily staked and pruned. Tomato experts Carolyn Male and Kokopelli's Dominique Guillet both oppose pruning, arguing more abundant foliage provides more photosynthesis.

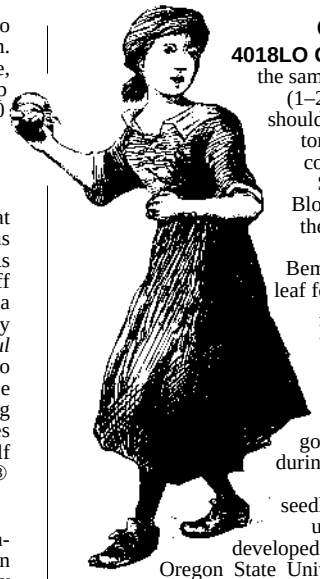
Richard Fochtmann of Leeds, ME, laments, "Please have a Fedco person who likes acidic tomatoes indicate which tomatoes are best. Current reviewer has a sweet tooth and likes tomatoes that taste like candy. Probably drinks too many slurpies!" Richard, guilty on the Sun Golds, not on the slurpies.

For all tomatoes, days to maturity are from date of transplanting.

Good seed retains viability so we often commission two-year productions.

Organically and sustainably grown seed was rinsed with a sodium hypochlorite solution to reduce risk of seed-borne disease. This treatment poses no health risks.

"Thank you so much for your incredible catalogue! On the first of January, I spent my afternoon reading the entire thing. What a perfect way to start the new year!"
–Jonathan Martin, Pawling, NY



Open-pollinated TOMATOES

4018LO Glacier OG (56 days) Det. Glacier ripens around the same time as the sub-arctics with about the same size (1–2"), and almost no cosmetic defects except yellow shoulders, but there the comparisons end. Glacier's rich tomato flavor relegates the insipid sub-arctics to the compost pile. It is also superior to the highly touted Siberia tomato, to Stupice, to Early Temptation to Bloody Butcher and, in fact, to every other tomato in the same class that we've tried. "Glacier tomato is a blessing for us," concludes Steven Williams of Bemidji, MN. Originally from Sweden, 1985. Potato-leaf foliage. MOSA-certified. ①②
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60
D=2g, $6.00 **E**=10g, $22.00

4025SO Oregon Spring OG (58 days) Det. Recommended as a "hedge" in northern climates for cold summers. When most other varieties fail to ripen in time, Oregon Spring matures good-sized fruit in August, actually performing best during cool summers. Develops more cosmetic defects in the heat and humidity. Bears succulent almost seedless fruits, up to 4" but somewhat variable. Tastes unusually good for such an early variety. Bred and developed from Russian parents by Dr. James R. Baggett of Oregon State University, and released in 1984. Not suitable for market growers. Resistant to V. ICS, MOFGA-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00
E=10g, $22.00

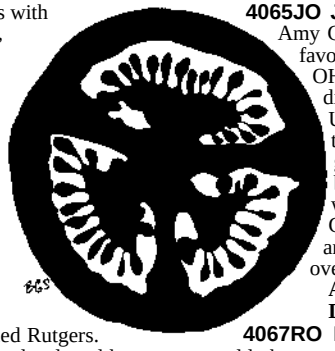
4032GO Ida Gold OG (59 days) Det. Often these delightful orange 2-bite low-acid fruits are the first tomatoes to ripen for us. They are early and prolific even in bad tomato years. Developed specially for the North by the University of Idaho. Performs indifferently in so-so soil, but yields bountifully when fed compost and rotted manure. MT-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00
E=10g, $22.00

4038CO Cosmonaut Volkov OG (65 days) Ind. A superb home garden variety with good commercial possibilities. Always good and occasionally sublime (the best two tomatoes I've ever eaten were Cosmonauts from different gardens in different years), Cosmonaut delivers the true tomato taste. And it is early, usually ripening quantities of deep red slightly flattened 8–12 oz globes at the beginning of August when tomato craving is at its peak. Even in cold summers, it will produce dependably by mid-August. What makes Cosmonaut so special is its juice: sweet, rich and full-bodied. Volkov was the Russian explorer who fell through space. From Dnepropetrovsk in the Ukraine, brought to America by the Seed Savers Exchange. OT, MOFGA-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00
E=10g, $22.00

4045PO Garden Peach OG (71 days) Ind. For well over a century savvy gardeners have brought Peach's little fruits indoors before frost to keep for several weeks. Doreen Mundie says these are also wonderful dried. 2 oz yellow fruits blush pink when ripe and have thin fuzzy skins somewhat like peaches. Relatively early, prolific, soft-skinned, juicy and very sweet. Light fruity taste is not what you'd expect in a tomato. Burpee in 1893 called it "delicate, melting in the mouth like a grape." Amy Goldman places its 1890 origins with plant breeder Elbert S. Carman, owner and editor of *The Rural New-Yorker*. It was introduced as a novelty in Hallock & Son's (of Queens) 1890 catalog. All seed is held over at 87% germination. OEFFA-certified. ①
A=0.2g, $1.50 **B**=0.4g, $2.50 **C**=1g, $4.00 **D**=2g, $6.50
E=10g, $25.00

4049RO Pruden's Purple OG (72 days) Ind. We continue to dispute whether Prudens is superior to Brandywine, but, opinions aside, Pruden's is early for its size and makes a great sandwich tomato. We are back to our customary strain which is potato-leaved bearing irregular pink 1 lb fruit with very few seeds, a silken texture and rich tomato taste, nicely tart with a balanced undertone of sweetness that is neither insipid nor cloying. Brett Grohsgal praises its flavor, productivity and disease resistance. OT, MOFGA-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60
D=2g, $6.00 **E**=10g, $22.00

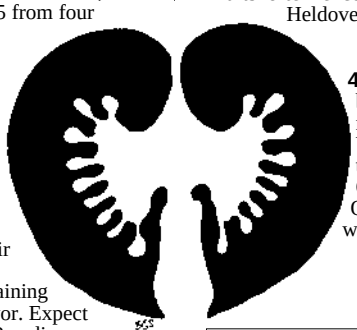
4053PO Black Prince OG (75 days) Ind. Welcomed by our customers after a 13-year absence from our catalog, the Prince of black tomatoes quintupled its sales. In 1997 when we were among the first to offer this émigré from Irkutsk, Siberia, we were way ahead of our time. Now the market has caught up to us. These iridescent 5–7 oz garnet-colored globe-shaped fruits are among the most uniformly handsome in the tomato kingdom. They have earned a reputation for outstanding flavor similar to that of Black Krim, but without Krim's fragility and tendency to crack. A superior home-garden tomato that is also a reliable heavy-yielding field-to-market choice for growers without high tunnels. OT-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00
E=10g, $22.00



4054GO Goldie OG (75 days) Ind. Considered synonymous with Dixie Golden Giant. Though reputed to be over 150 years old, Goldie was introduced commercially in 1977 by Gleckler's Seedsmen. I rate it as the best of all orange tomatoes, impressive for delivering its rich flavor with an extraordinary velvety texture. Deep orange beefsteak fruits, frequently bi-lobed, average 16–20 oz. Matures earlier than we have credited it for in the past, often Roberta's first large tomato to ripen. Erica Myers-Russo from CT advises, "Don't harvest it until it has a distinct rosy blush" (on the bottom). Very productive. Will catface under cold or excessively wet conditions. Several people who grew our Heirloom Mix reported that Goldie was their favorite. MOFGA-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

4055TO Rutgers OG (75 days) Ind. Two varieties are called Rutgers. We sell the original strain of this famous New Jersey tomato, developed by Campbell's Soup Co. in 1928 as a cross between Marglobe and JTD. When Rutgers University "refined" the variety in 1943, they took out some of the vininess but also some of the flavor. Our taste tests confirm that the original indeterminate strain is better. Long considered an outstanding slicing, cooking and canning tomato, the medium-sized 4–6 oz mostly uniform and unblemished deep oblate fruits with rich red interior and pleasing texture have that great old-time flavor, delicious and juicy. Resistant to F1, V1, ASC and GLS. OT-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $5.60 **E**=10g, $20.00

4056GO Green Zebra OG (77 days) Ind. A most unusual beast in the tomato menagerie, this zebra starts out green with darker green stripes, softening and blushing yellow and apricot when it ripens. It might have remained a mere curiosity, but for its delicious sweet rich flavor. 4–5 oz small-medium fruits are emerald green inside. Perfect exteriors hold up under adverse conditions and don't crack. Now commonly found in upscale markets. Sometimes incorrectly shows up on lists of heirloom tomatoes, but was developed by Tom Wagner of Tater Mater Seeds in 1985 from four heirlooms. Kent Whealy ranks it in his top ten tomatoes. Susceptible to SEPT. MOFGA-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00



4059CO Cherokee Purple OG (77 days) Ind. but with relatively short vines. No list of the best-tasting heirloom tomatoes would be complete without Cherokee Purple, an unusual variety from Tennessee, said to have originated with the Cherokee Indians. Fruits are globes to slightly oblate, averaging 10–13 oz, with dusky brownish-purple skin, dark green shoulders and brick-red flesh. The real attraction is their rich taste, described as "sweet rich juicy winey," "delicious sweet," and "rich Brandywine flavor" by aficionadoes maintaining it in the Seed Savers Exchange. Ranks in my top five for flavor. Expect some concentric cracking. Amy LeBlanc of Tomato Lovers Paradise suggests the vines should not be pruned because the delicate fruits sunburn easily. QCS, MOFGA-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

4060BO Paul Robeson OG (78 days) Ind. This Russian heirloom was named in honor of Paul Robeson (1898-1976) who befriended the Soviet Union. Athlete (15 varsity letters at Rutgers!), actor (played Othello in the longest-running Shakespearean production in Broadway history!), singer (world famous for his vibrant baritone renditions of Negro spirituals), orator, cultural scholar and linguist (fluent in at least 15 languages!), Robeson was an outspoken crusader for racial equality and social justice. Revered by the left, reviled by the right, he was blacklisted during the McCarthy Era and beyond, harassed by the FBI, his passport revoked for eight years, his career stifled. He died broken and almost forgotten, his life a testament to lost opportunities in 20th-century American history. His namesake tomato developed almost a cult following among seed savers. The maroon-brick 6–12 oz oblate often bi-lobed fruits with dark green shoulders come closest in flavor to Black Krim, but claim their own distinctive sweet smoky taste. A sandwich tomato with a tang, an extraordinary tomato for an extraordinary man. Reportedly prone to splitting. QCS, MOFGA-certified. ①②
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

4061KO Black Krim OG (80 days) Ind. Maine market grower Scott Howell says Black Krim outproduced Pruden's Purple in his greenhouse and warns that most people wait too long to harvest their heirloom tomatoes. Krims should be harvested when half green and still firm. They are dead ripe and perfectly delicious at that stage. If you wait till they are fully purple, you will not be able to get them from garden to table intact (to say nothing of market) and they will disintegrate like a hunk of road-kill. Krims are strikingly iridescent purple on the outside, usually with dark green-black shoulders and noticeable catfacing. Interiors are part black, too, with an unusual juicy yet meaty taste and texture, described as having "…a smoky flavor like a good single malt scotch." Fruits average 12–18 oz. Krim hails from Krymsk on the Black Sea in Russia. MOFGA, OT-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

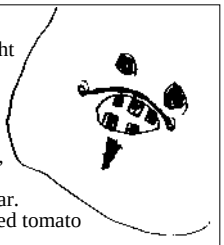
4065JO Jubilee OG (80 days) Ind. Also known as Golden Jubilee. Amy Goldman describes its flavor as "sprightly" and says it was a favorite of Ben Quisenberry of Big Tomato Gardens in Syracuse, OH, who offered it under the name Golden Sunray. Nikos discovered Jubilee at a Waldo County Extension taste test at Unity College. The best medium-sized open-pollinated orange tomato, Jubilee ripens smooth-textured sweet mild meaty 8 oz globes. Pruning will produce larger fruits. Nikos brought me back one from the tasting and it was superb, almost on a par with Goldie both for texture and flavor. Jubilee is smaller than Goldie and less prone to blemish. A cross between Tangerine and Rutgers, it won an AAS for Burpee in 1943. Seed is held over, tested at 83%. Resistant to ASC. MOFGA-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

4067RO Rose de Berne OG (80 days) Ind. This French émigré could be considered the Brandywine of continental Europe. Like Brandywine, has many strains, and is widely considered in France, Germany and Switzerland to be the best-flavored tomato. Only medium-sized yet delivers the robust flavor of the bigger types. It bested some formidable competition in our trials—including June Pink, Gulf State Market and the celebrated Eva Purple Ball with a rich sweetness the others couldn't match. I found myself enjoying one juicy 5 oz translucent smooth pink fruit after another. No slouch in the appearance department either, the unblemished globes are perfectly round, the soft skins not excessively fragile and the color and size very attractive, making it another excellent field-to-market variety that does not require high tunnels. Seed is held over, tested at 91%. Some LB tolerance. MOFGA-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

4069GO German Johnson OG (80 days) Ind. An old heirloom probably from Virginia or North Carolina. This large regular-leaf plant, one of the parents of Mortgage Lifter, is known for its copious yields of pink meaty fruits often exceeding 1 lb, mild with more than a touch of sweetness. Heldover seed tested at 82%. OT-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $5.60 **E**=10g, $20.00

4071SO Soldacki OG (80 days) Ind. You won't find a better sandwich tomato than Soldacki, a heavy producer of meaty tasty 14 oz pink globes (almost 2 lb reported Mike VanLoon of Bailey, MI) with a good mix of sweetness, tartness and real tomato flavor. Tall potato-leaf vines. Originally from Krakow, Poland, brought to Cleveland, OH, around 1900, then to Albany, NY. Prone to cracking in wet seasons. Maine-grown. MOFGA-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

PREVENTING LATE BLIGHT:



Some parts of our sales area suffered from late blight again this year. Even if you didn't, be mindful: in conditions of prolonged cool rain such as we had in 2009, in late summer 2011, and in June 2013, this disease can spread 30 miles per day.

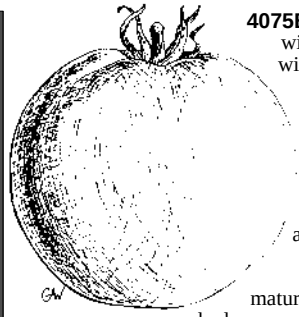
- Destroy—do not compost—any infected plants, fruits or parts. If you compost any diseased material, do not use that compost the next year.
- Late blight on tomatoes is not seed-borne. Saved tomato seed is okay if you ferment it properly.
- Grow your own tomato plants or buy locally grown seedlings. Know your farmer!
- Do not use saved potatoes as seed stock. Purchase only new certified-disease-free seed potatoes. More potatoes info on p. 111.
- For still more information, see our website.

Early blight shows up as drying and dying leaves *at the bottom of the plant.* EB can be managed culturally, should not result in significant loss of crop.

Late blight usually starts at the top of the plant or on the *windward side*. As the earliest infection arrives on warm southerly winds, monitor the south and southeast sides of the garden carefully. Later in the season the wind can bring it from any direction. Early in the season, late blight infection shows as roundish lesions on leaves that uniquely will *cross the center vein of the leaf*. Later, blotches appear on stems. Still later, hard crusty lesions form on fruits.

Septoria Leaf Spot can appear almost overnight. It is characterized by yellowing and small circular spots on older leaves. It can eventually spread to the entire plant in conditions of high humidity and temperatures. It can be spread by wind or carried on clothing and tools. Septoria can live over the winter on live tissue, so don't compost affected plants.

Consult **vegetablemdonline.ppath.cornell.edu/** for excellent photos and information. Use services such as the MOFGA Pest Reports to know if and when blight appears south of you.



4075BO Pink Brandywine OG (82 days) Ind. with potato-leaf foliage. Hardly a year passes without advocates claiming another pretender "is better than Brandywine." I demur. This famous tomato put heirlooms on the map and thick-skinned hybrids on the run. Pink Brandywine was introduced by the illustrious Ben Quisenberry around 1979, and was his favorite. Doris Sudduth Hill's family kept this tomato for over 100 years and gave Quisenberry his seed. Brandywine can be fussy to grow, has problems with catfacing, early blight and sometimes late maturity, but plenty of commercial growers have had success, even in northern New England. "Bite one, you'll be sold forever," advises Anne Elder. Meaty with just the perfect hint of tartness, the oblate beefsteak fruits average right around a pound, ripening unevenly throughout the season, often preferring the coolness of early fall to August's peak heat. MOFGA, OT-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

4076YO Yellow Brandywine OG (82 days) Ind. Growing Yellow Brandywine can be maddening. When she's good, she's very very good, but when she's bad she's awful. All strains (and there are several) develop irregularly-shaped fruits in Maine's extreme weather fluctuations. Good appearance correlates closely with good eating quality in this variety. Compost the weird-looking fruits; enjoy the good ones! Large slightly ribbed 1 lb fruits with an identifiable ring scar at the blossom end can be remarkably smooth, with a creamy texture and rich complex tangy flavor. Not the highest yielding. Potato-leaf foliage. In the running for best golden tomato, but by no means a shoo-in. Heldover seed germinates at 93%. OEFFA, MOFGA-certified. ①
A=0.2g, $1.40 **B**=0.4g, $2.30 **C**=1g, $3.80

4077NO Pineapple OG (85 days) Ind. The striped tomatoes are among my favorites. They have great names like Hillbilly, Mr. Stripey-Tigerella, Georgia Streak and Pineapple, silky smooth textures and complex fruity tastes. They often grow huge fruits in excess of 1 lb that get a little funky cosmetically. Pineapple, Amy LeBlanc's favorite salad tomato, is certainly characteristic—and may be the best of the genre. Cut in half, it looks like the interior of a pineapple except with yellow and red marbling. It doesn't taste like a pineapple, though, nor like a typical red tomato, either. Its unique mild low-acid fruity sweetness needs a fruit name all its own. Originally from Kentucky, but our seed stock came from Martha Gottlieb of Common Ground Fair Exhibition Hall fame. OT-certified. ①
A=0.2g, $1.50 **B**=0.4g, $2.50 **C**=1g, $4.00 **D**=2g, $6.50 **E**=10g, $25.00

4080AO Aunt Ruby's German Green OG (85 days) Ind. "The biggest surprise I've ever experienced in tomatoes," said the late Chuck Wyatt, vintage tomato collector. Until you try it, you won't believe a green tomato could be this good. I rate it second only to Brandywine for flavor and it is on just about everyone's top-ten list. Oblate 12–16 oz fruits blush lightly yellow and develop an amber-pink tinge on the blossom end when ripe. Don't allow them to get too soft before picking. The green flesh of this beefsteak is faintly marbled with pink. Flavor sweet and tart, rich and spicy. The central large tomatoes are the best. Flavor deteriorates when cold weather sets in. Created a sensation at our staff taste test in September 1996, where it was rated "good" or "excellent" by all who tried it. Aunt Ruby's is not just the best green eating tomato, it also makes a delicious basis for salsa verde. Originally from Ruby Arnold's German immigrant grandfather, introduced in the 1993 Seed Savers Exchange Yearbook by Bill Minkey of Darien, WI. Recently nominated to Slow Food's Ark of Taste. CCOF-certified. ③
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

Mark Twain OG (85 days) Ind. Crop failure; *not available in 2014.*

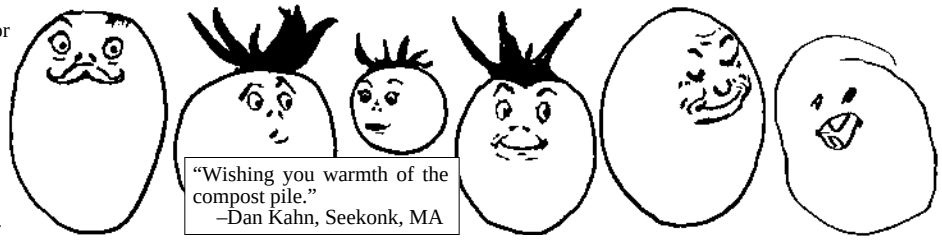
4083WO Weisnicht's Ukrainian OG (85 days) Compact Ind. with potato-leaf foliage. The tastiest heirloom tomato that almost no one knows. That won't be the case for long. We believe we are the lone commercial source, but that won't be true for long, either. We received the original seeds for this scrumptious pink tomato from Scott Weisnicht of Waupun, WI, in 2004 and in my trials that year it received an unusually high 4–4.5 out of 5 taste evaluation, #1 among the 43 varieties I grew that cold wet summer. We got a nice note from Weisnicht thanking us for our perseverance. It took us 9 years to get his tomato in the catalog. "I hope others will now enjoy what I have for many years now," he said. I savored my first fruit this year in Colrain on Sept. 4, the flavor sweet, rich and complex with delicious acid overtones. The medium-sized 8–12 oz fruits are sparse seed bearers. They begin producing in late August or early September with a 3–4 week moderately productive main harvest period. Finally a full crop this year. Weisnicht also supplied us with our first seeds for the much-revered rare #**946** Pride of Wisconsin melon. OT-certified. ①
A=0.2g, $1.50 **B**=0.4g, $2.50 **C**=1g, $4.00 **D**=2g, $6.50 **E**=10g, $24.00

4084SS Schimmeig Striped Hollow (85 days) Ind. Despite its scant sales, we refuse to drop this beautiful mostly hollow stuffing tomato, a spectacular gem in the fall garden. Sturdy plants filled with clusters of 2½–5 oz red fruits delicately painted with thin stripes of gold. Perfectly shaped like small tri-lobed bell peppers, Schimmeigs stand up straight, hold their shape and melt in your mouth. MOFGA-certified. ①
A=0.2g, $1.20 **B**=0.4g, $2.00 **C**=1g, $3.20 **D**=2g, $5.00 **E**=10g, $18.00

4087TO Tiffen Mennonite OG (86 days) Ind. Tiffen has many similarities to the more famous Brandywine—potato-leaf foliage, pink skin, and rich, rich old-fashioned tomato taste that has twice drawn raves at staff tastings. The large rough oblate beefsteak fruits (avg 15 oz) are a tad bigger and later than Brandywine. For a superb sandwich tomato or a fresh garden snack, heirloom Tiffen is hard to top! MOFGA-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

4091LO Lillian's Yellow Heirloom OG (88 days) Ind. Lillian's may be a little late, not coming on until September, but is worth waiting for. Her superb creamy consistency, meaty flesh and complex of rich deep flavors make her the best-tasting clear tomato, a perfect balance of engaging sweetness and intriguing citrus quality in every 1 lb fruit. These won't win any beauty contests, being bilobed, oblate and a bit lopsided, but will win taste contests. Fruit in clusters of 2 or 3. Prone to catfacing under stressful weather conditions. From Lillian Bruce, Manchester, TN. Seed tested at 89%. No new crop. If you love Lillian, *order early*. MOFGA-certified. ①
A=0.2g, $1.70

4097RO Ruby Gold OG (90 days) Ind. As aesthetically appealing as it is delicious, Ruby boasts prolific beautiful huge red-streaked yellow fruits with marbled interior flesh, meaty with superb mild sweet flavor, smooth melting texture and not a bit of acidity. Introduced by John Lewis Childs of Floral Park, NY, in 1921. Re-discovered by tomato aficionado Ben Quisenberry in Bob's Market in Mason, WV, in 1967, and re-introduced to commerce some years later. Quisenberry offered it under three different names, first Early Sunrise, later Gold Medal and finally Ruby Gold. Tomato cognoscenti rate it as one of the best. Fruits slightly flattened with red spot on the blossom end, seldom cosmetically perfect, prone to radial cracking. All seed held over; tested at 84%. MOFGA-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00



"Wishing you warmth of the compost pile."
–Dan Kahn, Seekonk, MA

Open-pollinated CHERRY TOMATOES

4106HD Honeydrop ECO (62 days) Ind. From a chance sport in their tomato patch Rachel and Tevis Robertson-Goldberg of Crabapple Farm in Chesterfield, MA, selected and developed Honeydrop, sent us the original seed and continue to grow our seed crop. Honeydrop has drawn comparisons to **#4252** Sun Gold, only with much less cracking in wet weather. Its sweet juicy fruity honey-colored treats taste almost like light grapes. In 2011, seeking to add another light-colored cherry to our selection, I trialed it against Blondkopchen, Dr. Carolyn, Isis Candy, Lemondrop and Weissbehart. It bested them all by such a wide margin in earliness, sweetness and complexity that we declined to add any of those others. *Still retains a percentage of recessive pink fruit off-types but see #**4107**; these are so yummy!* ① **BACK!**
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

4107PP Pink Princess Gene Pool ECO (62 days) From the originators of delicious #**4106** Honeydrop comes the even more exciting Pink Princess, a sensational recessive pink-fruited off-type of the Honeydrop. I had the memorable experience of sampling these in 2012 and I had never tasted a pink cherry tomato as deliciously sweet. Still very much a work in progress, but we couldn't wait to introduce it to the seedy world. Will still contain some delectable egg-shaped golden Honeydrop types, some small and larger red round entries as well as true Princesses. (No peas, however!) Early and prolific, ripened for Donna Dyrek in the last week of August from a June 7 transplanting. Would have been much earlier with more heat and less water in June. Destined to become a classic. ① **NEW!**
A=0.2g, $1.50 **B**=0.4g, $2.50

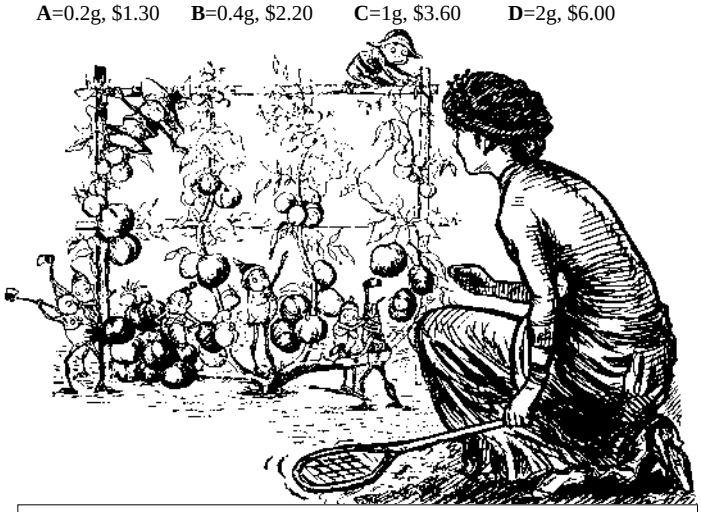
4108BO Be My Baby Gene Pool OG (65 days) Ind. This productive cherry is the ongoing result of a cross of three famous tomatoes: an heirloom potato-leaf beefsteak and two cherries, one orange and one red. The crossing and selection process for a red cherry with regular tomato foliage began in 1997 and is now complete. The grape tomato in its background lends a rich sweet flavor somewhat akin to that of Sweet Baby Girl, which it replaced. Bred by Relentless. All seed is held over. ☙2007. OT-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

4109GD Gardener's Delight (68 days) Ind. Also known as Sugar Lump, and of German origin, not an heirloom as we once believed. Introduced by Ernst Benary in 1950-51. A parent of the famous hybrid Sweet 100. Produces the kind of rich sweet deep red 1+" cherries that you will want to pop into your mouth in profusion while you bask in the garden sunshine. The large plants need staking and will bear till frost. The fruits taste so good that I overlook their annoying tendency to crack. ②
A=0.5g, $1.10 **B**=1g, $2.00 **C**=2g, $3.20 **D**=4g, $5.00
E=28g, $20.00

4115BO Black Cherry OG (75 days) Ind. Two-bite cherries with the dusky color and complex flavor typical of the best black tomatoes, juicy and delicious. Somewhat late for a cherry tomato, fruit ripens slowly and individually until frost, but worth the wait. Examine each plant closely at picking time: the dark-hued cherries are easy to lose in the foliage. Seems to tolerate the usual tomato diseases but fruits will crack readily in rainy weather. "I tried Black Cherry for the first time and was impressed. They tasted best if left to ripen on the vine till nice and dark, then they were sweet and juicy," reported Janine Welsby. Combine with #**4252** Sun Gold and any bright red cherry for a lovely display. Brix 7. CCOF-certified. ②
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00
E=10g, $22.00

4117PO Principe Borghese OG (75 days) Vigorous Det. An Italian heirloom with excellent flavor. Used for sun-dried tomatoes as it has few seeds and little juice. In our humid climate, we require a solar dryer or a 100˚ oven to dry the fruits successfully. Bears small fruits in prolific clusters over a long season. CSA grower Jill Agnew lauds them for holding their perfect shape so well without cracking. MOFGA-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00
E=10g, $22.00

4118YO Green Egg Yolk OG (78 days) Ind. A new color for cherry tomatoes, green blushing yellow when ripe. Almost the size, shape and color of an egg yolk. Charmed our tasters with its sweet fruity richness. Has been very prolific in my Colrain plots, both in 2010 and 2011 and was a star in my last Maine trial at Shooting Star Farm in 2008. We found this treasure in the Baker Creek Catalog. No yolk, it is a good one! Last offered in 2011. OEFFA-certified. ① **BACK!**
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00



Diseases: Bacterial Canker, Spec and Spot
Cultural controls: disinfect greenhouse materials & cages, farming tools & gloves, avoid overhead irrigation, don't work crop when wet, rotate crops, use compost.
Material: Copper (**8861-3**).

Disease: Anthracnose
Cultural controls: rotation, mulching, minimize plant wetness, staking, use compost.

Disease: Early Blight
Cultural controls: rotation, avoid stressing plants, staking, keep leaf wetness to a minimum, mulching, indeterminate varieties are more resistant/tolerant, disinfect stakes & cages.
Material: Trichoderma harzianum (Root Shield **8853**) or Streptomyces lydicus (Actinovate **8851**).

Disease: Late Blight
Cultural controls: Destroy cull potatoes & potato volunteers, avoid overhead irrigation.
Material: copper products.

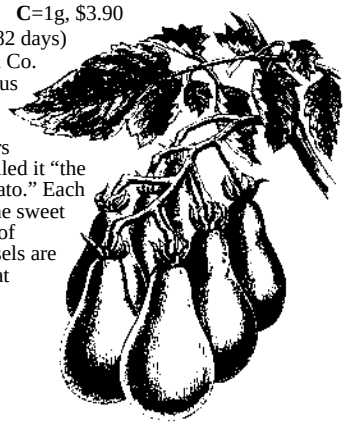
Disease: Septoria Leaf Spot
Cultural controls: space plants for good air circulation.
Materials: copper products.

Pest: Tomato Hornworm
Control: Look for frass (droppings) and handpick. Eeeuww!
Material: Bt *kurstaki* (**8902**), Spinosad (**8922-4**).

Pest: Tarnished Plant Bug
Cultural controls: Floating row covers (**9101**), good weed control.
Material: try Pyrethrum (**8925**) products.

4119VO Peacevine OG (78 days) Rampant Ind. Selected by Peace Seeds from Sweet 100 cherry tomato and almost identical in fruit size and growth habit. Bears gazillions of sweet clusters each with 8 or so 1" fruits. Has the currant tomato in its ancestry. Very high in vitamin C and GABA, a sedating neurotransmitter. That may be why Alan Kapuler named it Peacevine. Jan Sonstrom calls it "dependable as ever, with wonderful sweet/tart rich flavor." All seed held over, tested at 91%. CO-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00
E=10g, $22.00

4121DO Green Doctors Frosted OG (81 days) Ind. We won't claim that a Green Doctors a day will keep the doctor away, but it couldn't hurt. We will predict that you won't be able to eat just one! Roberta, who had been growing only Sun Gold, added GDF to her cherry line-up because it is so low acid, so sweet, so delicious, and was so much better than Green Grape in our trials. There are two strains of Doctors; this frosted one is the sweeter of the two. Fruits green with a silver frost, blush gold when ripe. One year Roberta's ripened the 3rd week of July from transplants; mine have been much later. Named in honor of the two doctors, Amy Goldman and Carolyn Male, who have written influential books on tomato varieties. Goldman discovered Green Doctors as a cherry sport of Dr. Carolyn in her 2002 garden and turned us on to it in her book *The Heirloom Tomato*. Oval fruits ¾" wide and 1¼" long average 11.2g, wonderful additions to a cherry tomato mix. Makes great salsa verde; just add lime. Large 5' rambling plants are prolific producers and resisted EB all season. MOFGA-certified. ①
A=0.2g, $1.40 **B**=0.4g, $2.50 **C**=1g, $3.90



4122FO Fargo Yellow Pear OG (82 days) Ind. Introduced 1934 by Oscar Will & Co. of Bismarck, ND, yet another of famous breeder A.F. Yaeger's creations. He crossed Bison with Yellow Pear for earliness and higher yields. Our trialers all gave high ratings to Fargo. One called it "the first pear tomato that tastes like a tomato." Each plant produces about three dozen of the sweet tasty 1 oz fruits. About twice the size of regular pear tomatoes, the meaty morsels are crack resistant. All seed is held over, at 91%. ICS -certified. ①
A=0.2g, $1.20 **B**=0.4g, $2.00
C=1g, $3.30 **D**=2g, $5.50
E=10g, $20.00

Open-pollinated PASTE TOMATOES

A highlight near the end of each growing season is our paste tomato taste-off. Over the years, we've gotten the most requests for Roma, San Marzano and Opalka. Opalka debuted in our 2010 catalog and met great response. I call San Marzano the Sugar & Gold of the paste set, its formidable reputation not backed by our taste tests. We've tried numerous strains and all have fallen short. Apparently it needs the volcanic soils of Italy to bring out its full potential. Roma has also disappointed us.

4123MO Mr. Fumarole OG (65 days) Ind. The same cultivar we formerly sold as Mr. Fumo. This large elongated 3–6" pinkish plum tomato was a winner in our 2007 paste test. Comments included "top of the line, rich, complex," "has a crispy brown flavor that lingers," "very flavorful, sweet meaty good," "nice blend of flavors, tart but full tomato flavor," and "sweet, somewhat bland but haunting. I would try it again." Though tough-skinned, can also be eaten out of hand where its tart sweetness pleases. Fair yields. Did not get blossom-end rot, even in 2011 when that disease was prevalent in other paste varieties. ☙2009. OT-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00
E=10g, $22.00

4125HO Heinz 2653 OG (68 days) Det. An amazingly early red plum type which often ripens all its 2½–3 oz fruits before frost. Firm fruits for cooking, on compact plants. "The perfect canning tomatoes for a short season huge late blight pressure area. Small, loaded plants, fruits stayed clean even after all the leaves were gone. Most ripened at once so I could collect a huge canner load from a small number of plants," report the Wolperts in WV. All seed held over, germs at 92%. OEFFA-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00
E=10g, $22.00

4131GO Grandma Mary's OG (68 days) Ind. "(Despite) our drought in 2012…we have a pantry full of canned veggies and stacks of filled jars around the house…Grandma Mary's is the best paste tomato ever and #**4055** Rutgers, my canning tomato, was great," recount Penny and Lou Kujawinski of Harrisburg, MO. In Sangerville, ME, Jeanne Griffin selected seed from this heirloom for 6 years for earliness and fruit size. Grandma's meaty 6–10 oz fruits are very early for their size. Grandma produces fruit even during cold summers. ☙1992. VOF-certified. ①
A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00
E=10g, $22.00

4133LO Bellstar OG (74 days) Det. Bred at Smithfield Experiment Farm in Ontario and introduced in 1981. Bears red 4 oz round paste tomatoes much larger than most others of this type. Delicious flavor is also good in salads. Ripening is spread over a long season. VOF, OEFFA-certified. ①
A=0.2g, $1.60 **B**=0.4g, $2.80 **C**=1g, $5.00 **D**=2g, $8.00
E=10g, $36.00

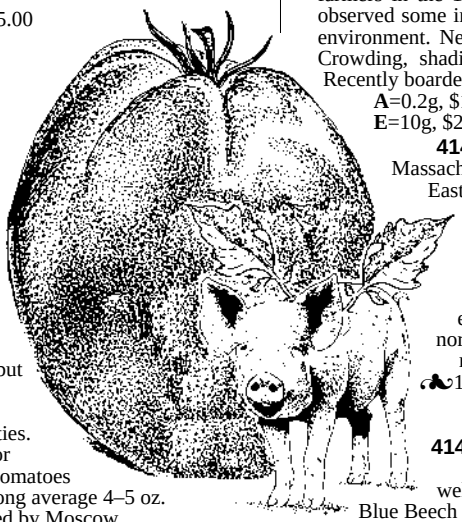
Open-pollinated Paste Tomatoes, continued

4135PO Opalka OG (82 days) Ind. Its third time in our taste test (2009) proved the charm for Opalka. Our tasters have commented, "an oasis of flavor in a desert of tomato hell," "a pleasing texture and good aftertaste lingers," "round and mellow flavor…full-bodied." Has developed fans such as Jessica M. Silver of Charlottesville, VA: "I can't wait for the Opalka tomatoes. They are to die for." Expect copious yields of 3x5" massive solid bull's horn-shaped red fruits with dry texture and few seeds. Also dries well. While some tomatoes faltered during the hot dry spells in 2010, Opalka produced consistently. The crinkly foliage is normal and not an indication of plant disease. Polish heirloom brought by the Opalka family to Amsterdam, NY, around 1900. MOFGA-certified. ①

A=0.2g, $1.60 **B**=0.4g, $2.80 **C**=1g, $5.00 **D**=2g, $8.00 **E**=10g, $36.00

4136VM Vilms (82 days) Ind. Crop failure; *not available in 2014.*

4137NO Orange Banana OG (85 days) Ind. "Roasted Orange Banana tomato with olive oil and herbs—oh my, out of this world," says Doreen Mundie. I never would have believed that the best tomato sauce comes from an orange tomato. But the proof is in the eating and Orange Banana has been the perennial winner of our annual paste taste-offs. Comments from tasters include, "the best flavor and sweetness yet, wow!" and "gourmet candlelight." No wonder Banana has become a staple of David's famous tomato sauces. Its sprightly sweet flavor, reminiscent of Sun Gold but with more depth and diverse tones, makes an ambrosial sauce by itself and adds a vivid fruity complexity to any sauce with other tomato varieties. Erica Myers-Russo in CT grows it exclusively for drying. She claims it "makes the sweetest dried tomatoes ever." Attractive cylindrical orange fruits 3–4" long average 4–5 oz. Susceptible to blossom-end rot. Originally offered by Moscow seedswoman Marina Danilenko in the 1996 Seed Savers Yearbook. MOFGA-certified. ①

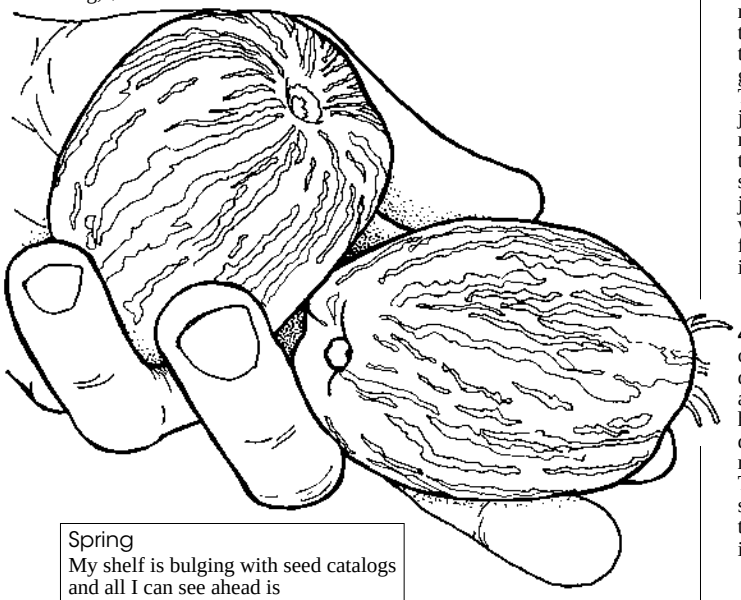


A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

Casady's Folly OG (85 days) Det. *No longer available.* Casady's Folly proved to be Fedco's folly. Customers made it clear that they prefer Speckled Roman's taste.

4138RO Speckled Roman OG (85 days) Ind. Audrey Newcomb's note was one of several similar, "Miss Speckled Roman, one of my favorites, so dependable and with great flavor for a paste tomato." Okay, folks, we blew it when we allowed a few disease issues to obscure the virtues of John Swensen's psychedelic-looking creation. Near the top in our 2005 sauce test for its rich tomatoey sweetness and good texture, Roman's red cylindrical fruits are covered with orange-yellow striations, something like an Amish Paste with stripes from an Orange Banana. The actual parents are Antique Roman and Banana Legs, and the fruits have the distinctive nipple of the latter. Plants bear an early abundance of meaty 4–5 oz fruits. An underground favorite of many seed savers, Roman has found its way into commerce where it will now stay. *Susceptible to disease in cool wet seasons*. Last offered in 2011. OT-certified. ① **BACK!**

A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00



Spring
My shelf is bulging with seed catalogs and all I can see ahead is abundance.

4140AO Amish Paste OG (85 days) Ind. 26 seed savers can't be wrong! That's how many listed Amish Paste in the 2012 Seed Savers Yearbook, making it one of the most popular items in the Exchange. Their comments tell it all, "large red meaty fruit," "wonderful paste variety," "great flavor for cooking, canning or fresh eating," "a very fine cultivar in many ways," "the standard by which I judge canning tomatoes," "huge production," "great for sauces, salsa, canning." Ranked as the 2nd best-tasting variety at the 2006 Heirloom Tomato Tasting at Decorah, IA. Though it has not fared that well in some of our sauce tests, its flavor has been consistently good even in poor tomato years. Strong producer of oxheart fruits up to 8 oz. Thick bright-red flesh. Larger and better than Roma. Wisconsin heirloom from Amish farmers in the 1870s, first surfaced in the 1987 SSE Yearbook. We have observed some inherent variation, based on how this variety responds to its environment. Needs room and good nutrition to set mostly nippled fruits. Crowding, shading or stress cause reduced fruit size and less nippling. Recently boarded Slow Food's Ark of Taste. MOFGA-certified. ①

A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

4141HO Hog Heart OG (86 days) Ind. Brought from Italy to Massachusetts, probably between 1910 and 1920, and then by Susan Eastman and Ed Lacy of Gray, ME, to the Exhibition Hall at the 1988 Common Ground Fair, Hog Heart has won many admirers. So-named because it sometimes produces large heart-shaped double fruits. More often, though, its 6–8 oz tomatoes are shaped like banana peppers. A meaty paste tomato noted for its sparse seed cavity, good solids and excellent flavor fresh, canned or frozen. It is late for extreme northern areas and some fruits catface. All seed held over. "For my money the best paste tomato going," says Amy LeBlanc. ☙1999. VOF-certified. ①

A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

4146BO Blue Beech OG (90 days) Ind. This large elongated paste tomato won our sauce test in 1997, besting several well-known varieties. We received seed from Annette Smith of Blue Beech Farm in Danby, VT, and have named the variety in honor of her farm. Our Maine seed grower complained that it is not seedy (good for sauce, poor for seed production) and she gave it a similar but uncomplimentary name! Smith got the tomato from her neighbor's niece's uncle who brought it to Vermont from Italy during World War II. This Roma type has been acclimated in chilly Vermont for the last 50 years, so it is better adapted to cold climates than Roma. Some years it makes a richly textured sweet sauce that's just brimming with flavor. Fruits, averaging 6–8 oz, often have green shoulders. Needs long season, but our increasingly mild extended falls have facilitated ripening. ☙1999. MOFGA, OT-certified. ①

A=0.2g, $1.60 **B**=0.4g, $2.80 **C**=1g, $5.00 **D**=2g, $8.00

TOMATO MIX

4149MO Heirloom Tomato Mix OG We'll mix a bunch of varieties (all organically grown seed) in one packet. You'll get different colors, sizes, shapes and flavors (no cherries). All you'll need is an open mind, a good sense of observation, unjaded taste buds and acute deductive faculties. Then you can figure out which ones you like and order them by name next year.

A=0.2g, $1.30 **B**=0.4g, $2.20 **C**=1g, $3.60 **D**=2g, $6.00 **E**=10g, $22.00

Hybrid TOMATOES

4207JT Juliet (60 days) Ind. There will be no lack of Romeos who want to nibble on these and no lack of the delectable little plum-shaped fruits for them to adore. They come in clusters everywhere, each truss bearing 6–8 of the 1–2 oz grapes for an astonishing total of 50–80 fruits per plant. The glossy red fruits have an engaging sweetness that will make you want more. They are good stewing tomatoes, excellent salad tomatoes, and, despite their juiciness, surprised us by making a tangy sauce with a diverse complex richness and full sweet tomato flavor. Lynn Sagalyn of Philadelphia reports that "Juliet is my favorite tomato for drying. Cut them in half, flip out the seeds and dehydrate…They are like tomato 'raisins'—chewy and sweet to just eat, put on pizza, or add some red to a winter stir-fry." As if all this weren't enough, this 1999 AAS winner is firm enough to hold on the vines for up to two weeks, crack resistant, tolerant to LS and LB, and fairly invulnerable to insect or slug damage. ③

A=0.2g, $2.70 **B**=0.4g, $5.20 **C**=1g, $12.00 **D**=2g, $22.00 **E**=4g, $42.00

4211PM Premio (60 days) Ind. A primo early cluster tomato and a centerpiece for my new global warming tomato strategy *sans* hoophouse: to depend on the new generation of flavorful cluster hybrids such as Premio and #**4225** Mountain Magic for September production after rains and blights have beaten down my favored heirlooms. Delicious Premio gets that job done—between Aug. 31 and Sept. 14, 2012, I harvested 97 of its perfectly round red uniform thick-skinned almost 4 oz fruits from just two plants. These ripen 4–8 to a cluster, firm but juicy and refreshing with nice texture, sweetness and flavor and awesome holding quality in the field. Cascades of them keep coming and coming. First ripe fruit for Donna Dyrek was Aug. 10 in 2011, a bit later for me in 2012. ⑤

A=0.1g, $2.30 **B**=0.2g, $4.20 **C**=0.4g, $8.00 **D**=1g, $17.00 **E**=4g, $65.00

4218BC Bobcat (65 days) Det. This cat replaced Seminis/Monsanto's Big Beef, boasting the same impeccable looks, disease resistance, slightly flattened round shape, 6–10 oz maincrop size, thin skins, midseason maturity and medium red color, ideal attributes for commercial growers. A massive plant with huge leaves, thick strong stems and big fruit set. From an April 4 start and June 11 transplanting, our trialer harvested her first ripe fruit on Aug. 15. Small packet sales dropped significantly from year 1 to year 2, suggesting that its mild flavor with a spicy sweet accent may be too bland to please home gardeners seeking that heirloom complexity. We'll keep looking for a maincrop hybrid for all. Price reduced; we are overstocked. Resists F1, F2, GLS and N. ⑤

A=0.1g, $2.20 **B**=0.2g, $4.20 **C**=0.4g, $8.00 **D**=1g, $16.00 **E**=4g, $60.00

4225MM Mountain Magic (69 days) Compact Ind. If we were profiling elite plant breeders as we did in 1998 and '99, NC State University's Emeritus Professor Randy Gardner would be at the top of our list. Gardner, who "retired" in 2008 after 32 years, is still adding to his impressive oeuvre of 22 superb tomato varieties, most bearing his signature prefix 'Mountain.' Gardner was among the first to take up the heirloom challenge to breed flavor into his hybrids, and he is among the first to combat late blight. Mountain Magic, with grape tomato in its parentage, epitomizes both Gardner's foci. Even in my unstaked unpruned overcrowded tomato jungle, his unblemished round crack-free two-bite red fruits stood long. Almost all were marketable, growing in clusters of 7 or 8, 10–11 to the pound. As for production: rousing. During a 15-day period beginning Aug. 31, 2012, I harvested 106 fruits—all but three perfect—from a single plant. Juicy with a rich sprightly flavor that greatly pleased and refreshed me. Resists LB, V, F1-3 with tolerance to EB. ~480 seeds/g, 9-10/pkt. ④

A=0.02g, $3.80 **B**=0.04g, $7.20 **C**=0.08g, $13.00 **D**=0.2g, $28.00 **E**=1g, $110.00

4230SS Spring Shine (71 days) Ind. Our customers have yet to take a shine to this early tomato so *this is the last year we will offer*. Outstanding in our 2007 and 2008 grow-outs, it sets 5 oz deep red globes in clusters with 4–6 fruits per branch with a pleasing mix of acids and sugars that brought high taste ratings even in the subpar tomato year of 2008. First ripe fruit was Aug. 14 for Dyrek, Aug. 16 for me—ahead of most of the pack. Develops green shoulders. All seed held over; tested at 85%. ③

A=0.2g, $1.30 **B**=0.4g, $2.40 **C**=1g, $3.60 **D**=2g, $5.50 **E**=4g, $10.00

4233JS Jet Star (72 days) Compact Ind. As hybrids go, Jet Star has been around for a long time. The 1979 Harris catalog reported, "Our Jet Star met with as great a reception as any introduction we ever offered." Almost 30 years later it remained their best-selling hybrid tomato. In a test of 16 commercial varieties grown in high tunnels at Highmoor Farm, it had the highest yield of total marketable and premium-quality fruit. The University of Maine Food Lab also rated it the top greenhouse tomato. Year after year it was the best early full-sized tomato in our trials, ripening prolific quantities of cosmetically perfect 7–8 oz globes with outstanding flavor. The smooth firm fruits almost never scar or crack and have excellent interior and exterior coloration. Resistant to F1 and V. ④

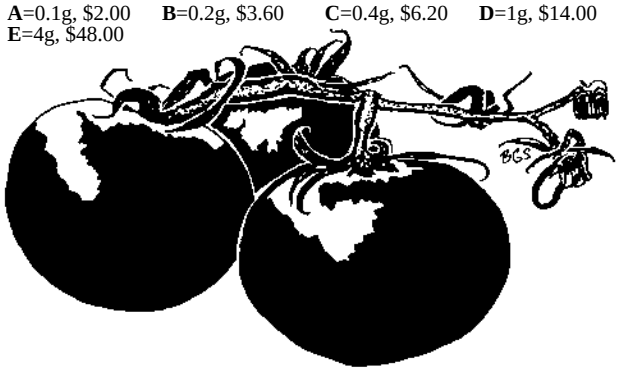
A=0.2g, $2.20 **B**=0.4g, $4.20 **C**=1g, $10.00 **D**=2g, $18.00 **E**=4g, $35.00

4236HT Heather (73 days) Compact Ind. Here's our replacement for Seminis/Monsanto's Celebrity, long in coming but worth the wait. It beat Celebrity in our blind taste test and was four days earlier. Round, red and medium-sized, its 6–8 oz fruits look every bit as good as Celebrity's, too. Has that elusive balanced sweet and tart flavor that is uncommon in hybrids. Skins good and firm but without toughness. Fruits juicy but not watery. Ripened for Donna Dyrek Aug. 15 from an Apr. 14 start. ③

A=0.1g, $3.20 **B**=0.2g, $6.20 **C**=0.4g, $11.50 **D**=1g, $22.00 **E**=4g, $80.00

4238LO Luci 2103 OG (73 days) Ind. Replacing Buffalo in our greenhouses, uniform productive Luci was the first of its class to ripen in our trial, setting about 10 clusters, each with 3–4 fruits. We loved Luci for its earliness, uniformity, high yields and disease resistance. 6 oz. red fruits are flavorful, mild, juicy, a little mealy, rarely crack, never have green shoulders. Beautiful sturdy vigorous healthy plants show good leaf cover. Along with #**4084** Schimmeig, gets my vote for our most under-appreciated tomato cultivars AGRIOR-certified. ③

A=0.1g, $2.00 **B**=0.2g, $3.60 **C**=0.4g, $6.20 **D**=1g, $14.00 **E**=4g, $48.00



Hybrid CHERRY TOMATOES

4252SG Sun Gold (57 days) Ind. To quote one customer, "Without these little babies, there's *no summer*." A perfect combination of deep sweetness with a hint of acid tartness, so good that for almost a decade it took away our incentive to trial cherry tomatoes because all others paled in comparison. In a field replete with choices, Eli and I are drawn to Sun Gold like candy. What *is* its elusive alluring tang? At last in 2012 we reached surfeit, quart after quart gracing our tables from July 2 through September. Small fruits, borne in prolific clusters, ripen very early to a rich apricot color and keep producing till frost. Very prone to split so pick early when rains are forecast. Brix 8. More here than mere sugar, Mr. Fochtmann! Resists F1, TMV. ⑤

A=0.1g, $3.20 **B**=0.2g, $6.20 **C**=1g, $29.00 **D**=2g, $56.00 **E**=4g, $110.00

4253AY Aria Yellow Pear (68 days) Never a false note from these sweet golden-yellow oblong fruits. Their flavor, not just sweet, has a little spicy acid undertone. Beneath their firm tough skins that resist cracking, they are very tender. First ripe fruits were around the beginning of August. Bear an abundance of the pointy grapes, "ten zillion" of them, according to our trialer. In her words, their taste and fruit quality "put Fargo to shame." Suitable for high tunnel production. **NEW!** ③

A=0.1g, $3.20 **B**=0.2g, $6.20 **C**=0.4g, $11.50 **D**=1g, $22.00 **E**=4g, $80.00

4254ST Sweet Treats (75 days) Ind. Absolutely unique among cherry tomatoes for its phenomenal flavor and incomparable gorgeous deep ruby color with matte finish at peak ripeness. Roberta says, "These are as close in taste to a full-size tomato as I've ever eaten, with a complexity and balance of sweetness and flavor, low acid and mellow." Large fruits (20–30g) come in clusters of 12–15 per truss. Perfect for salads and snacking. Ripens from pink to deep rose. Wait for full color to harvest. Brix 8–9. "My vote is a resounding yes at any price," concluded Roberta. "I will grow this and I don't add cherries to my garden very often." New in 2013 and well-received. Tolerant to cracking. Resistant to TMV0,1, F1,2 and leaf mold. Tolerant to GLS, crown and root rot. ~400 seeds/g, 8 per packet. ⑤

A=0.02g, $3.60 **B**=0.04g, $6.80 **C**=0.08g, $12.00 **D**=0.2g, $24.00 **E**=1g, $100.00

4256SW Super Sweet 100 (78 days) Ind. Like Sweet 100, only with more disease resistance. Very popular hybrid cherry tomato ripens clusters of 1" round sweet fruits. Should be staked. Will split in rainy conditions. Resistant to V and F1. ⑤

A=0.2g, $4.20 **B**=0.4g, $8.20 **C**=1g, $20.00 **D**=2g, $38.00 **E**=4g, $72.00

Hybrid GRAPE TOMATOES

These grape-shaped fruits have become quite the rage in the last few years, and customers have enthusiastically embraced our two selections.

4266HB Honey Bunch Red Grape (45 days) Ind. I've never been fond of grape tomatoes, but I'll make an exception for this honey bunch! Not for Mr. Fochtmann, there's no complexity here, just a luscious over-the-top sweetness with a honeyed nuance that could be habit-forming. For maximum enjoyment, wait until it ripens fully to a bright red in the field. That's easy because they are very crack-resistant and seem to hold field quality forever. Our trialers loved the texture of these bright red 10–14g 1x1½" fruits, the size of cherries, but the shape of grapes. "Like small Juliets," they said. And they are oh so early! with trialer Donna Dyrek beginning the harvest on July 5, 2011. Broad tomato leaf foliage. High-yielding vigorous vines are tolerant to EB. Brix 9. Happy snacking! ③

A=0.1g, $3.80 **B**=0.2g, $7.50 **C**=0.4g, $14.00 **D**=1g, $32.00 **E**=4g, $120.00

4271LU Lucia (54 days) Ind. Everyone in our taste test kept coming back for more of these super crunchy red grapes. The consensus: these diminutive 5–8g sweet fruits can boast of some tartness and complexity. They "taste like a red Sun Gold." Unlike Sun Gold, they have some crack resistance, vulnerable only in cold wet weather. Starting very early (July 15 in our trial), Lucia cranks out tons of bright red fruits great in salads, on pizzas or in sauces. Brix 7.5. ③

A=0.1g, $3.40 **B**=0.2g, $6.60 **C**=0.4g, $13.00 **D**=1g, $28.00 **E**=4g, $105.00

Hybrid PASTE TOMATO

4293SD San Diego (64 days) Det. "Just what you want in a paste tomato," exclaims Adam Tomash. "It keeps putting out good-tasting tomatoes for a long time." Won our paste test of determinate hybrids, producing 30 scarlet-red 2½ oz fruits that began ripening during the third week of July in 2011. Most had ripened by Aug. 10, and the plants were the only ones in the trial to hold out until September without succumbing to EB. Fruits mostly oval without cracking or green shoulders. A very uniform and marketable disease-resistant hybrid paste. ③

A=0.1g, $3.30 **B**=0.2g, $6.50 **C**=0.4g, $12.00 **D**=1g, $25.00 **E**=4g, $95.00

Directions for ordering SEEDS

- See pages 2 & 3 for more information.
- Order only seeds (#'s 1-6500) on seeds form. Do not order potatoes, cover crops, supplies or books here. Potatoes order form is page 77. Cover crops, supplies and books order form is page 79.
- Be sure to use a current catalog. Prices, item numbers and availability change!
- Please fill in your address. We must have a road name for UPS.
- Please plan your order before filling out the form. If you need more pages, download them from our website (fedcoseeds.com), make photocopies or call (207) 426-9900.
- Please keep a copy of your order. Send us the original.
- Write clearly in **pen**, not pencil. Pencil glares and is hard to see.
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- Make sure you have the correct item number with its two-letter suffix. Do not write the item name.
- Make sure you are ordering an available size. Write the code letter for the size. Do not write the weight.
- Please **make a subtotal for each column** and total your order even if paying by credit card.
- Writing your order in catalog number order is helpful, but not essential.
- Please start at #1 and fill consecutively. Skip spaces only for cross-outs. Finish the front side before using the back.
- All add-ons are treated as separate orders.

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- All Fedco Seeds items are taxable.
- Seeds discounts apply only to items #1-6500.
- **Please attach a separate page for suggestions**.

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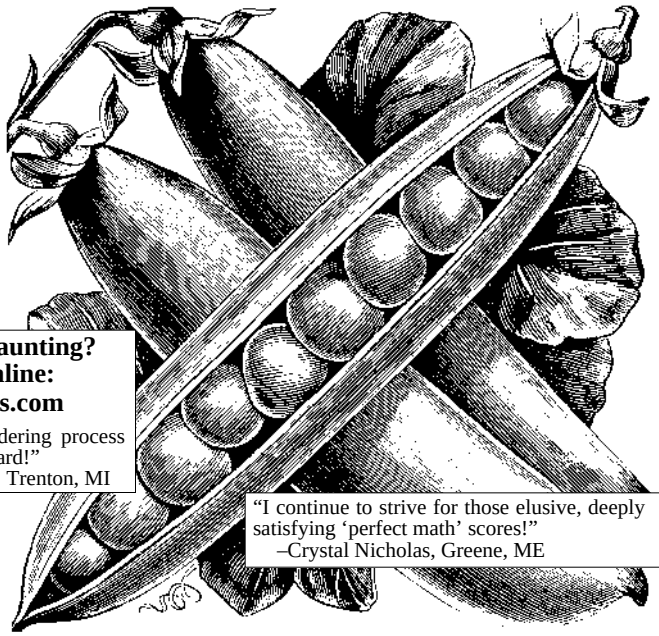
We ask you on your order form whether you will accept substitutions. Our default option is to substitute, so that *if you do not decline substitutions we will make them if necessary* rather than out-of-stock you.

- If you ordered a snow pea, we will substitute a snow pea. We will give preference to very similar snow peas of comparable maturity date, height, color, etc, but will substitute any other snow pea we have if necessary. If we have no other snow peas, we will *not* substitute a shell pea or a bean or anything else.
- We will substitute hybrids for open-pollinated varieties only when that is our sole alternative.
- If we have to substitute a more expensive variety, we will not charge you more.
- If we run out of organically produced seed we will substitute high quality conventional seed for the same variety unless you instruct us otherwise.
- If we run out of conventional seed we may substitute organically produced seed for the same variety, but charge you only the conventional seed cost.
- We are sorry that we cannot honor specific substitution requests.



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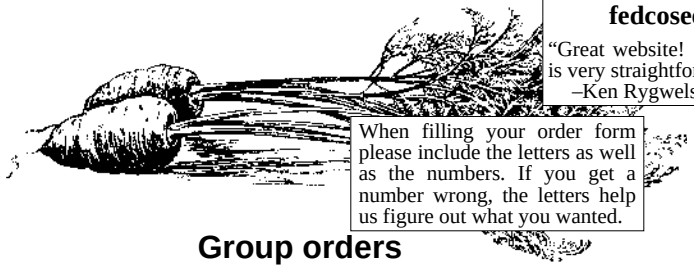


When filling your order form please include the letters as well as the numbers. If you get a number wrong, the letters help us figure out what you wanted.

Group orders

We will pull and package each order separately and ship all to *one address*. Discounts apply to one division, combined totals. You may not combine orders from different divisions to qualify for a higher discount.

We accept group orders **online**. Group coordinators can find details at our website. Go to the Seeds page and click on Group Ordering.

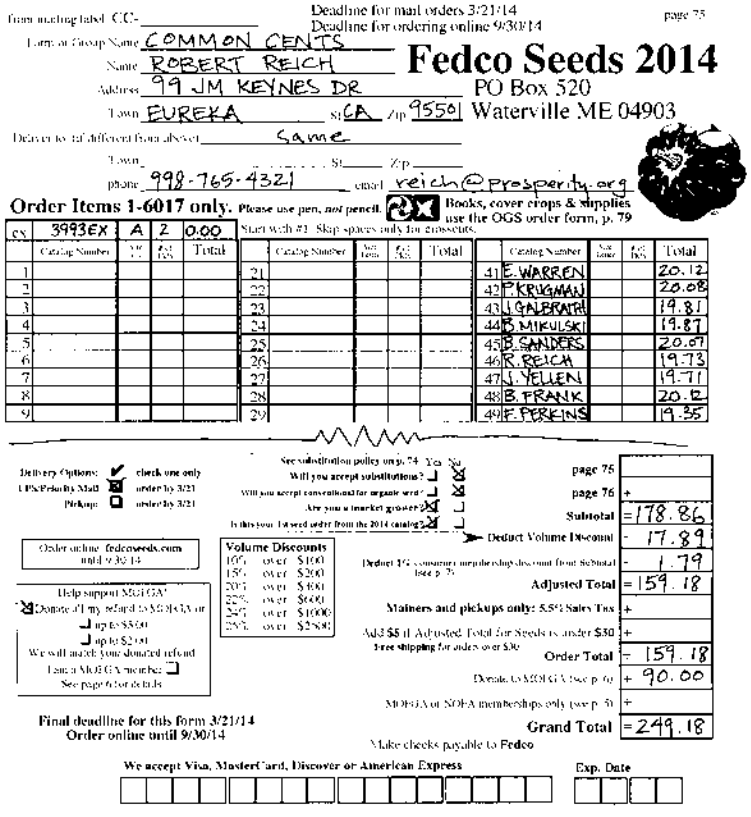
Or use the **mail** and bundle individual orders with a summary form for each division with address information and totals. Please keep copies.

How to prepare a summary form:

- Attach a separate summary page for **each division** (Seeds, MT, OGS, Trees). Use an order form with no items on it, fill in name and address blanks and totals information. See example.
- A summary form without individual totals is acceptable.
- Please use **one method of payment** for each division order (one check or one credit card). You may combine totals for all divisions and send one check. Please include credit card number and expiration date on summary form for each division.
- Additional orders over $50 qualify for original (or largest) discount. Indicate if you ordered seeds from us previously this season and tell what discount you qualify for.
- Figure all discounts from subtotal. See example.
- We treat all add-ons as additional orders.

Group coordinators' responsibilities:

- Collect individual orders and payments from group members.
- Make sure each item of each individual order is on proper form (for example, no potatoes on the seeds form); make necessary corrections.
- Add up order subtotals for each division. Keep track of individual payments and settle with group members after the final shipment.
- If your total places you just over a discount level, consider buying a little more as insurance against a math mistake that would bring you back to a lower discount level.
- Bundle orders for each division with a summary and one payment and mail to us.
- Receive and distribute back-ordered items.
- Send us correction sheets for any errors in group order.



Deadline for mail orders 3/21/14
Deadline for ordering online 9/30/14

page 75

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Books, cover crops & supplies use the OGS order form, p. 79

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	Catalog Number	Size Letter	Qty	Total
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42	P. KRUGMAN			20.08
43	J. GALBRAITH			19.81
44	B. MIKULSKI			19.87
45	B. SANDERS			20.09
46	R. REICH			19.73
47	J. YELLEN			19.71
48	B. FRANK			20.12
49	F. PERKINS			19.55

Delivery Options: ✔ check one only
UPS/Priority Mail ☒ order by 3/21
Pickup ☐ order by 3/21

See substitution policy on p. 74 Yes No
Will you accept substitutions? ☐ ☒
Will you accept conventional for organic seed? ☐ ☒
Are you a market grower? ☒ ☐
Is this your 1st seed order from the 2014 catalog? ☒ ☐

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10% over $100
15% over $200
20% over $400
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24% over $1000
25% over $2000

page 75		
page 76	+	
Subtotal	=	178.86
Deduct Volume Discount	-	17.89
Deduct 1% customer membership discount (see p. 75)	-	1.79
Adjusted Total	=	159.18
Mainers and pickups only: 5.5% Sales Tax	+	
Add $5 if Adjusted Total for Seeds is under $30 (free shipping for orders over $30)	+	
Order Total	=	159.18
Donate to MOFGA (see p. 6)	+	90.00
MOFGA or SOPA memberships only (see p. 50)	+	
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See substitution policy on p. 74	Yes	No
Will you accept substitutions?	❑	❑
Will you accept conventional for organic seed?	❑	❑
Are you a market grower?	❑	❑
Is this your 1st seed order from the 2014 catalog?	❑	❑

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22%	over	$600
24%	over	$1000
25%	over	$2500

page 75	
page 76	+
Subtotal	=
Deduct Volume Discount	-
Deduct 1% consumer membership discount from Subtotal (see p. 7)	-
Adjusted Total	=
Mainers and pickups only: 5.5%Sales Tax	+
Add **$5** if Adjusted Total for Seeds is under **$30**	+
Free shipping for orders over $30 **Order Total**	=
Donate to MOFGA (see p. 6)	+
MOFGA or NOFA memberships only (see p. 5)	+
Grand Total	=

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Exp. Date

Fedco Seeds 2014 items 1-6500, pages 14-109 only

VEGETABLE, HERB & FLOWER SEEDS

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If you need more blanks, please photocopy, download from our website, fedcoseeds.com, or call 207-426-9900 for another copy.

VEGETABLE PLANTING GUIDE

Vegetable	Catalog # range	avg. sds/oz	sds/100'	Pkt plants	distance apart	thin to	row spacing	seed depth	min soil temp °F	ideal soil temp	hardiness	planting dates
Artichoke	3608	180	T	10 pl	3'	No	2'	1/2"	60	65-85	MH	tp late
Arugula	3020-29	13000	3g	60'	1"	4"	18"	1/4"	50	65-85	MH	May 1/Aug 1
Asian Greens, assorted	3200-23	5000-10000	varies					1/4"	50	65-85	MH	early May
Basil	4414-4470	18000	5g	10-80'	1/2"	4"	18"	1/4"	65	70-85	VT	June 1
Bean, Bush, Dry	200-79,326-90	90	8 oz	25'	3-4"	No	2-3'	1"	60	60-80	T	late May
Bean, Fava	298	17	1#	12'	3-4"	No	2-3'	1"	50	40-75	H	ASAP
Bean, Lima	323-325	65	1#	40-60'	4-6"	No	3'	1"	60	70-85	VT	late May
Bean, Pole	280-97,318,322-5,371	65	6 oz	10 pl/oz	6/pole	3/pole	3-4'	1"	60	60-80	T	late May
Bean, Soy	480-99	80	5 oz	10'	3"	No	3'	1"	60	70-90	T	June 1
Beet	2100-99	2200	5/8 oz	20'	1"	2-4"	12-18"	1/2"	40	60-85	H	Apr-July
Broccoli	3300-29	7000	5g	.5g=10'	1"	24-30"	30"	1/4"	50	65-85	MH	tp May/June
Brussels Sprouts	3330-49	5000	5g	.5g=10'	1"	24-30"	24-30"	1/4"	50	65-85	H	tp May/June
Cabbage	3350-99	7500	5g	.5g=10'	1"	24-30"	24-30"	1/4"	40	55-95	MH	tp May/June
Carrot	2000-99	18000	10g	1/8oz=35'	1/4"-1/2"	1"	16-24"	1/2"	40	60-85	H	Apr-July
Cauliflower	3400-40	8000	4g	.5g=12'	1"	30"	30-36"	1/4"	40	55-80	MH	tp May/June
Celery/Celeriac	3610-49	75000	T	500	8"	No	2-3'	1/8"	40	59-70*	T	tp June 1
Chard	3030-42	800-2000	1 1/2 oz	5-13'	1"	3-6"	18-24"	1/2"	40	50-85	H	ASAP
Chicory	3046-48	18000	T	300 pl	1'	No	2'	1/8"	50	60-85	H	tp late June
Chinese Cabbage	3224-25	9500	1/4 oz	25'	1/2"	12-18"	24-30"	1/4"	50	70-95	MH	late May
Corn, OP	500-699	100	4 oz	50'	3"	1'	3'	1"	50	60-95	T	late May
Corn, hybrid	500-699	155	4 oz	50'	3"	1'	3'	1"	50	60-95	T	late May
Cress	3050-58	9000	3g	50-70'	1/2"	1-2"	18"	1/4"	50	65-85	MH	May 1
Cucumber	1200-1399	1000	1/2 oz	11'	2"	4"	3-4'	1/2"	60	65-95	VT	June 1
Eggplant	3650-91	6000	T	40 pl	20-30"	No	30-36"	1/4"	60	75-90*	VT	tp early Jun
Endive	3060-92	18000	5g	40'	1"	8"	18-24"	1/4"	50	60-85	H	Apr-July
Gourds, large	1960-99	175	T	20 pl	6/hill	2-3/hill	6'	1/2"	60	70-90	T	tp early Jun
Gourds, small	1900-59	500	1/5 oz	10 hills	6/hill	3/hill	4-6'	1/2"	60	70-90	T	late May
Kale/Collards	3441-69	7500	5g	40'	1"	12"	2'	1/4"	50	65-85	VH	ASAP-July
Kohlrabi	3470-79	8500	4g	50'	1"	24"	24"	1/4"	50	65-85	MH	tp May/June
Leek	2400-29	10000	T	600 pl	8"	No	2'	1/2"	50	60-70	MH	tp May 1
Lettuce	2700-2999	25000	4g	1g=25'	1/3"	1'	12-18"	1/8"	35	40-80	H	ASAP-Aug
Mâche	3100-19	18000	1/4 oz	30'	1/2"	2"	18"	1/4"	48	50-68	VH	ASAP-Aug
Melon	900-49,1000-99	1200	T	14-20 hills	3/pot	2/hill	5'	1/2"	60	75-95	VT	tp early Jun
Mustard	3228-59	15600	1/8 oz	40'	1"	4-6"	2'	1/4"	50	65-85	MH	Apr-Aug
Okra	3695-99	420	T	30 pl	12"	No	2-3'	1/4"	60	70-90	VT	tp early Jun
Onion/shallots	2440-99	7000	T	450 pl	4"	No	12-18"	1/2"	50	60-70	MH	tp May 1
Pac Choy	3260-73	12500	1/4 oz	30'	1/2"	6-12"	2'	1/4"	50	70-95	MH	May
Parsley	3155-79	18000	1/4 oz	25'	1/4"	1"	12-18"	1/4"	40	50-80	VH	Apr-Aug
Parsnip	2305-10	5000	1/2 oz	25'	1/2"	2-3"	12-18"	1/2"	52	60-77	VH	Apr-July
Pea	700-899	110	8 oz	25'	1 1/2"	No	3-5'	3/4"	40	50-75	plants H	ASAP
Pea for fall crop	700-899	110	8 oz	25'	1 1/2"	No	3-5'	3/4"	40	50-75	blossoms,pods T	July
Pepper	3700-3999	4500	T	10-50 pl	12-18"	No	2-3'	1/4"	60	68-95	VT	tp early Jun
Pumpkin	1700-99	100-280	1/2-1oz	3-8 hills	5/hill	3/hill	6'	1"	60	70-90	T	late May
Radicchio	3186-91	varies	1/2 oz	30'	1"	8-10"	18"	1/8"	50	60-85	H	late June
Radish	2200-99	2500	1 oz	12'	1/2"	2"	18"	1/2"	40	55-85	H	Apr-Aug
Rutabaga/Turnip	2350-99	9000	1/3 oz	40'	1/2"	3-6"	18"	1/4"	40	60-95	H	Apr-July
Salsify/Scorzonera	2318-22	2000	5/8 oz	20'	1"	2"	18"	1/2"	50	65-85	H	Apr-Jun
Scallion	2439	9200	1/4 oz	15-25'	1/2"	1-2"	12-18"	1/2"	50	65-85	MH	ASAP-Aug
Spinach	2500-99	1400-2600	1/2 oz	40'	1"	2"	12-18"	1/2"	35	45-65	VH	ASAP
Spinach, fall crop	2500-99	1400-2600	1/2 oz	40'	1"	2"	12-18"	1/2"	35	45-65	VH	Aug
Squash, patty pan	1577-90	300	5/8 oz	5-8 hills	5/hill	2-3/hill	4'	1"	60	70-90	T	late May
Squash, winter	1600-99	120-440	1/2-2 oz	3-15 hills	5/hill	3/hill	4-6'	1"	60	70-90	T	late May
Squash, summer	1400-1599	320	1/2 oz	5-8 hills	5/hill	2-3/hill	4'	1"	60	70-90	T	late May
Tomato	4000-4299	9000	T	50-125pl	3'	No	3'	1/4"	50	60-85	T	tp June 1-10
Watermelon	950-99,1100-99	600	T	7-14 hills	3/pot	2/hill	5'	1/2"	60	75-95	VT	tp early Jun
Zucchini	1400-79	180	1 oz	4-6 hills	5/hill	2-3/hill	4'	1"	60	70-90	T	late May

Abbreviations Pkt plants=how many row feet or hills our smallest packet will plant
T=transplanted only, in our climate.
tp=transplant pl=plants g=grams, 28.4g=1oz. No=not necessary to thin
*Celery and some varieties of eggplant require fluctuating day and night temperatures for good germination.

Hardiness rating VT=very tender: will not survive frost, can be damaged by temperatures under 40°
T=tender: will not survive frost
MH=moderately hardy: survives light frosts
H=hardy: survives frost generally to the low twenties
VH=very hardy: will overwinter if protected

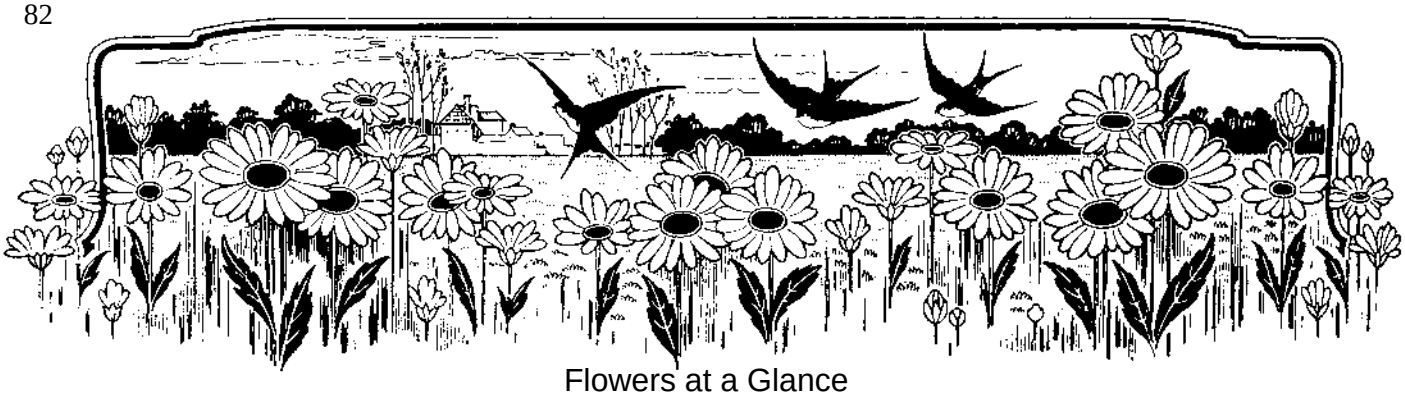
Approximate planting date:
ASAP=as soon as ground can be worked, does not thrive in heat
Approximate planting dates are for *our* Central Maine climate. Please make appropriate adjustments for your climate, using hardiness as a guide.

Cultural information for flowers is on pages 82-83 and for herbs on page 84.

Notes: Seed counts are provided as a *guide*, not a *guarantee*. They vary from cultivar to cultivar. Planting rates will vary if intensive methods such as beds are used. Minimum soil temperatures are the lowest that will permit *any* germination. Expect slow spotty germination if you plant below or above the ideal range. For a good stand and quickest emergence plant as close to the middle of the ideal range as possible. If you have specific cultural questions, consult more detailed resources or get in touch with us.

A few seeds with unusually thick or hard coatings may benefit from **scarification** just before sowing. This is accomplished by nicking them with a knife, a pinpoint or lightly scratching them with sandpaper.

Some seeds need to be **stratified** before sowing. This tricks the seed by thinking it has gone through winter followed by the gradual warm-up of spring. It is accomplished by first moistening and then chilling the seed for a specified period of time.



Flowers at a Glance

Name	item#	Botanical Name	APB	height	uses	season	sow	start	temp	days	notes
Achillea	4802ff	*Achillea spp.*	P	18-24"	BDC	ES-F	DS DF TP	8-10	C	10–14	Lt
Acroclinum	4807	*Helipterum roseum*	A	2'	DCB	MS-F	DW TP	8-9	C	14–21	
Ageratum	4811ff	*A. houstonianum*	A	8",24"	BCD	ES-F	TP	6-8	W	4–6	◗S
Alyssum	4821	*Lobularia maritima*	A	2-4"	FBW	ES-F*	DS TP	8-9	55-70	8–14	◗S
Amaranth Love-Lies-Bleeding	4831	*Amaranthus caudatus*	A	24-48"	BND	MS-F	TP	5-6	W	7–10	PP
Amaranth	4833ff	*A. cruentus*	A	3-5'	CND	MS-F	TP DS	6-7	W	10–14	◗Lt
Ammi Majus	4843	*A. majus*	A	3-4'	C	ES-LS	TP DS	8-10	M	7–14	Ch2w
Aster, New York	4849	*Aster nova-belgii*	P	36-48"	B	LS-F*	TP	6-8	M	14-36	Ch2w
Aster, China	4851ff	*Callistephus chinensis*	A	12-30"	BC	ES-F	TP	12-14	W	10–21	◗
Baby's Breath	4861	*Gypsophila paniculata*	P	24-40"	BDC	MS-LS	TP DS	8-10	M	14–21	S
Bachelor's Button	4871ff	*Centaurea cyanus*	A	24-36"	BC	ES-F*	DW TP	8-9	C	7–14	◗Cv
Balloon Flower	4881	*Platycodon grandiflorum*	P	30-42"	CB	MS-LS	TP	6-8	M	15–30	S
Balsam	4883	*Impatiens balsamina*	A	24"	B	MS-F	DW		W	8–10	◗S
Bee Balm	4886	*Monarda didyma*	P	30"	BCD	MS-LS	DS TP	8-10	C	14–21	◗S, Lt
Begonia	4889	*B. x tuberhybrida*	A	8-12"	BW	ES-LS	TP	12-14	W	14–28	●
Bellflower	4893	*Campanula carpatica*	P	6-10"	B	ES-F	TP	6-8	C	7–21	◗
Bells of Ireland	4896	*Moluccella laevis*	A	30"	DBN	MS-F	TP	6-8	C	12–21	◗S, Ch5d50°
Blazing Stars	4899	*Liatrus spicata*	P	18"	BCD	LS	DS TP	6-8	C	21–28	
Bouncing Bet	4901	*Saponaria officinalis*	P	36"	BGF	MS	TP	8-10	M	14-28	◗St
Bupleurum	4903	*B. griffithii*	A	2'	DCN	ES-F	TP	8-10	C	14–21	◗
Butterfly Weed	4906	*Asclepias tuberosa*	P	18-30"	BCN	ES-LS	DS DF		W	14–28	Ch4w34-40°
Calendula	4911ff	*C. officinalis*	A	18-24"	BDCE	ES-F*	DS TP DF	6-8	C	4–10	Cv
Canary Creeper	4932	*Tropaeolum pereginum*	A	8'	BV	LS-F	DW TP	6-8	C	7–14	◗Cv
Candytuft	4935	*Iberis odorata*	A	20"	BGF	MS-LS	DWG		M	14–21	
Catmint, Persian	4937	*Nepeta mussinii*	P	12"	BG	Sp-MS	TP DS DF	6-8	C	10–14	
Celosia, Crested/Cockscomb	4943	*Celosia argentea*	A	10"	BND	MS-LS	TP	4	W	10–14	
Celosia, Plume	4948ff	*C. a.*	A	3-6'	DCNB	LS	TP	8-10	W	10–14	
Cerinthe	4962	*C. major purpurescens*	A	12-18"	B	MS-F*	TP DW	6-8	W	7–14	
Chinese Forget-Me-Not	4965	*Cynoglossum amabile*	A	18"	B	MS-LS	DW TP	6	M	5–10	
Chinese Lantern	4968	*Physalis alkekengi*	P	24"	DNC	MS-F	TP DF	8	W	14–21	◗S, invasive
Cleome	4982ff	*C. hasslerana*	A	48"	BN	ES-LS	TP DW	4-6	W	7–14	Ch, S
Coleus	4992	*Solenostemon scutellar.*	A	10-12"	WBN	MS-F	TP	8-10	M	10-14	●Lt
Columbine	4995ff	*Aquilegia spp.*	P	18-30"	B	Sp-ES	TP DS	6-8	W	14–28	●Lt,Ch3-4w
Coneflower, Prairie	5007	*Ratibida columnifera*	P	1-3'	B N	MS-LS	TP	6-8	W	7–42	Ch1w
Coreopsis	5012	*C. grandiflora*	P	18"	BC	ES-F	TP	8-10	C/M	7–21	◗Lt
Cosmos	5021ff	*C. bipinnatus*	SSA	3-5'	BCS	MS-F	DW TP	2-4	W	7–10	Lt
Cosmos, Yellow	5038	*C. sulphureus*	A	2-3'	BC	MS-F	DW TP	2-4	W	7–10	
Dagga	5041	*Leonotis leonurus*	A	6'	B	MS	TP	12-14	C/M	10–21	
Dahlia	5045	*D. x hybrida*	A	12-14"	BC	MS-F	TP	6-8	W	7–14	◗
Daisy	5425ff	*Leucanthemum x super.*	P	36"	BC	ES-MS	TP	6-8	W	7–14	
Delphinium	5052ff	*D. x cultorum*	P	3-6'	BCD	MS-LS	TP	10	M/W	14–21	Ch2-4w
Dianthus (Carnation, Pink)	5061ff	*Dianthus spp.*	A	12-20"	BCF	MS-LS	TP	8	M	7–10	
Didiscus	5067	*Trachymeme coerulea*	A	24"	CB	MS-LS	DW TP	8	W	14–21	
Dyer's Broom	5902	*Genista tinctoria*	P	3'	dye	MS-F	DS			14–21	
Dyer's Coreopsis	5904	*C. tinctoria*	SSA	30"	CB	MS-F	DS TP DF	6-8	C	4–10	S, rugged
Echinacea	4545ff	*Echinacea spp.*	P	1-3'	BC	MS-LS	TP DW	8-10	W	10–21	◗
Euphorbia	5075	*E. marginata*	A	24-36"	CNB	MS-F	DW TP	3	M	9–14	◗
Flax, Blue	5079	*Linum perenne lewisii*	P	9-12"	B	ES-LS	DS TP DF	6-8	C	21–28	◗
Flowering Cabbage/Kale	5082ff	*Brassica oleracea*	A	8-18"	BNE	F-F*	DSTP	5-7	C	7–14	start Jun for Aug TP
Forget-Me-Not	5091	*Myosotis sylvatica*	B,P	6-12"	BCG	Sp-ES	DS	8-10	M	8–30	

ff=and following

Flowers at a Glance

Name	item#	Botanical Name	APB	height	uses	season	sow	start	temp	days	notes
Four O'Clock	5095	*Mirabilis jalapa*	A	24-36"	BF	ES-LS	TP DW	6-8	W	5–10	
Gaillardia, perennial	5097	*Gaillardia aristata*	P	24-36"	BC	MS-F	TP DW	6-8	W	14–21	Lt
Gaillardia, annual	5099	*G. pulchella*	A	12-15"	BW	MS-F	TP	6-8	W	14–21	Lt
Globe Amaranth	5102ff	*Gomphrena globosa*	A	2'	BD	MS-F*	TP	8-12	M	7–30	Dk, Ch5w
Heliopsis (False Sunflower)	5113	*H. scabra*	P	3-6'	BCS	MS-F	TP DW	10-12	M	21	
Heliotrope	5116	*Heliotropium arborescens*	A	14-18"	FWBC	MS-F	TP	6-8	W	21–28	◗
Hollyhock	5122ff	*Alcea rosea*	SSB	4-8'	BS	MS-LS	TP DF	8-9	WM	7–21	St
Honesty (Silver Dollar)	5132	*Lunaria annua*	B	3'	DN	LS-F	DS TP DF	6	M	14–21	◗
Impatiens	5142	*Impatiens wallerana*	A	8-14"	WB	ES-F	TP	10	W	7–21	●Lt
Indigo, Japanese	5911	*Polygonum tinctorium*	A	1-2'	dye	MS-F	TP	6-8	W	20–60	
Jacob's Ladder	5144	*Polemonium caeruleum*	P	1'	B	ES	TP	8-10	M	20–25	◗
Job's Tears	5147	*Coix lacryma-jobi*	A	24-36"	DN	F	P	6-8	C	7–14	
Joe Pye Weed	5150	*Eupatorium purpureum*	P	5-9'	BNC	LS-F	DS DF		M	14–21	S, St
Johnny-Jump-Up	5152	*Viola tricolor*	SSP	4-6"	EB	Sp-F*	DS DF		M	12–14	◗
Kiss-Me-over-the-Grdn	5154	*Polygonum orientale*	A	6-7'	NSB	MS-F	DS DF TP	4-6	W	14–20	Cv, St
Larkspur	5160ff	*Consolida spp.*	A	24-36"	BCD	ES-F*	DS TP DF	6-8	C	14–28	◗Cv, Ch1w
Lavatera	5171ff	*L. trimestris*	A	20-36"	BC	MS-F	DS TP	6-8	C	14–21	◗Cv
Lobelia	5180	*Lobelia erinus*	A	4"	BW	ES-F	TP	6-8	M	20	◗S, Lt
Love-in-a-Mist	5184ff	*Nigella spp.*	A	15-24"	BD	MS-F	DS TP	6	M	10–14	
Love-Lies-Bleeding	4831	*Amaranthus caudatus*	A	24-48"	BND	MS-F	TP	5-6	W	7–10	PP
Lupine	5195ff	*Lupinus polyphyllus*	P	36"	B	ES	DS TP DF	6–8	C/M	14–60	◗Sk, PP
Madder	5913	*Rubia tinctorium*	P	4'	dye		TP	8	W	14	
Maltese Cross	5203	*Lychnis chalcedonica*	P	28-40"	BC	MS	TP	8-10	M	7–14	◗
Marigold	5211ff	*Tagetes spp.*	A	8-30"	BCW	MS-F	TP DW	3	W	5–8	Dk
Mignonette	5255	*Reseda odorata*	A	10-15"	F	ES-LS	DW		M	10–14	◗S, Lt
Morning Glory	5271ff	*Ipomoea spp.*	A	8-12'	VS	ES-F	DW TP	3	W	10–21	Sc, Sk, PP
Nasturtium	5280ff	*Tropaeolum spp.*	A	12-16"	BEWC	ES-F	DW TP	3	M	10–14	Cv
Nicotiana	5300	*Nicotiana sylvestris*	A	4-6'	FN	MS-F	DS TP	6-8	W	7–14	Lt
Painted Tongue	5303	*Salpiglossis sinuata*	A	15"	BC	ES-F	TP	6-8	M	14–21	
Pansy	5304ff	*Viola x wittrockiana*	A	6"	BCW	Sp-ES	TP DF?	8-9	C	14–21	◗Dk
Pearly Everlasting	5314	*Anaphalis margaritacea*	P	18-24"	DCB	MS-F	DS TP	6-8	C	10–60	
Petunia	5321ff	*P. x hybrida*	A	4-6"	WBG	ES-F	TP	8	W	7–14	Lt
Phlox, annual	5335ff	*P. drummondii*	A	6-8"	BC	ES-F*	TP DS	8	C	7–14	◗
Phlox, perennial	5339	*P. paniculata*	P	36"	BC	LS-F	TP DF	10-12	C	21–30	◗St
Pincushion Flower	5341	*Scabiosa atropurpurea*	A	36"	BC	MS-F*	TP DW	4-5	M	14-21	
Poppy, Oriental	5345	*Papaver orientale*	P	16"	BND	Sp-ES	DS			7–14	Lt
Poppy, annual	5350ff	*Papaver spp.*	SSA	24-48"	BCND	MS-LS	DF DS			14–21	
Poppy, California	5381ff	*Eschscholzia californica*	A	8-12"	B	MS-LS	DS			14–21	
Poppy, Mexican Tulip	5384	*Hunnemannia fumariifolia*	A	2'	BCND	MS-LS	DS, DF			14–21	
Red Hot Poker	5343	*Kniphofia uvaria*	P	32"	BCN	MS-LS	TP	8-10	M	21–28	PP
Rudbeckia, perennial	5393	*R. fulgida*	P	24"	BC	MS-LS	TP	6-8	W	7–21	Lt
Rudbeckia, annual	5395ff	*R. hirta*	A	24-36"	BCN	ES-LS	TP DF?	6-10	W	14–21	
Sage, Gentian	5411	*Salvia patens*	A	30"	BC	MS-F	TP	12-14	M/W	14–21	S
Salvia	5406ff	*Salvia spp.*	A	12-18"	BCD	MS-F	TP	10-12	M	21	S
Schizanthus	5422	*Schizanthus pinnatus*	A	18"	BC	MS-F	TP	8	C	7–14	◗S, Dk
Snapdragon	5431	*Antirrhinum majus*	A	30-36"	BC	MS-F*	TP	8-10	C/M	7–14	◗Ch2w, Lt
Sneezeweed	5434	*Helenium autumnale*	P	4-5'	BC	LS-F	TP	6-8	M	14–21	
Statice	5444ff	*Limonium sinuatum*	A	24-30"	DCB	MS-F	TP	8-9	M/W	7–14	S
Statice, German	5471	*Goniolimon tataricum*	P	20"	D	LS-F	TP DS DF	6-8	W	14–21	
Stock	5475	*Matthiola incana*	A	12-18"	BC	ES-F*	DS TP	6-8	M	7–14	S
Strawflower	5483ff	*Helichrysum bracteatum*	A	14-40"	DBC	MS-F	TP	7-8	W	7–14	Lt, S
Sunflower	5500ff, 5906	*Helianthus spp.*	SSA	2-12'	CNS	LS-F	DW TP	3-4	M/W	7–14	
Sweet Annie	5603	*Artemisia annua*	SSA	36-60"	FD	LS-F	DF TP	6-8	C	10–21	◗Lt, St
Sweet Pea, perennial	5611	*Lathyrus latifolius*	P	5-6'	CSV	MS-LS	DS		C	21–28	Sk, Cv
Sweet Pea, annual	5614ff	*Lathyrus odoratus*	A	1-6'	CFSV	MS-LS	DS TP	6-8	C	14–21	Sk, Cv
Sweet William	5061	*Dianthus barbatus*	P	18"	FBC	ES	DS TP	6-8	M	7–14	
Thyme, Creeping	5643	*Thymus serpyllum*	P	2-3"	FGB	MS-LS	DS TP DF	8-9	C	14–28	◗Lt
Tithonia	5647ff	*T. rotundifolia*	A	4-6'	BNS	MS-F	TP DW	6	W	7–14	
Verbascum	5657	*V. x hybrida*	P	2-3'	BC	ES	TP	15-20	C	14–21	
Verbena	5661ff	*Verbena spp.*	A	8", 48"	WBC	MS-F	TP	6-8	M	14–21	◗Lt, Ch3w
Weld	5928	*Reseda luteola*	B	4-5'	dye	MS	TP	6-8	M	7–14	S, Lt
Zinnia	5700ff	*Zinnia spp.*	A	20-42"	BC	MS-F	TP DW	3-4	W	7–14	

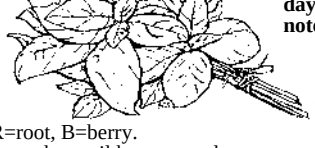
ff=and following

ABP: A=annual, B=biennial, P=perennial, SS=self-sowing
height: typical height at maturity
uses: B=beds and borders, C=cutting, D=drying, dye=dye plant, E=edible, F=fragrance, G=ground cover, N=novel accent, S=screen, V=vining and climbing, W=windowbox, container
season: peak bloom time: Sp=spring, ES=early summer, MS=midsummer, LS=late summer F=fall until frost, F*=fall after frost
sow: DS=direct sow in spring ASAP, DW=direct sow when soil has warmed or after danger of frost has passed, TP=transplant, DF=direct sow in fall
start: suggested number of weeks before transplanting
temp: suggested soil temperatures for good germination: C=cool, 60-65˚, M=moderate, 65-70˚, W=warm, 70-85˚
days: number of days to seedling emergence
notes: ◗=can grow in partial shade, ●=can grow in full shade or part shade. (The rest need sun.)
S=surface sow, Cv= cover seed, PP=use peat pots
Lt=needs light to germinate, Dk=needs darkness to germinate,
Sk=soak seed 12-24hrs, Sc=scarify seed with sandpaper or emery board,
St=stratify seed; place in moist soil and freeze or refrigerate or alternate between the fridge and freezer,
Ch=chill seed, sometimes specifies duration (d=days, w=weeks) and temperature

Cultural Information and Planting Instructions for Herbs

Name	item#	Botanical name	ABP	height	uses	part	sow	temp	days	notes	cover	sun
Anise	4406	*Pimpinella anisum*	A	1-3'	S B M	S	DS	M	7-28		L	PF
Anise Hyssop	4407	*Agastache foeniculum*	P Z4	2-3'	B M	L F	DW TP	W	7-14	Lt	P	FP
Arnica	4409	*A. chamissonis*	P Z4	20"	M O	F	TP	C		St		F
Ashwagandha	4411	*Withania somnifera*	TP/A	2-3'	M	R	TP	M	7-21	Lt	N	FP
Astragalus	4412	*A. membranaceus*	P Z4	18-48"	M	R	DS TP	M	7-28	Sc Sk	L	F
Basil	4414ff	*Ocimum basilicum*	TA	8-24"	S E M	L	TP DW	W	4-10	W	R	F
Basil, Sacred	4467	*Ocimum sanctum*	TA	18-24"	S M	L	TP DW	W	4-10		R	F
Bergamot	4481	*Monarda fistulosa*	P Z3	3-4'	B M O	L	DS DF	M	7-14	Lt	N	FP
Blessed Thistle	4484	*Cnicus benedictus*	A	1-2'	M	F L	TP DS	M	7-21	St	L	F
Borage	4491	*Borago officinalis*	SSA	2-3'	E M O	F L	DS DF	C	7-14		P	FP
Calendula	4911ff	*Calendula officinalis*	SSA	18-24"	M O	F	DS	M	4-14		R	FP
Caraway	4507	*Carum carvi*	SSB	2'	S E M	S L	DS	C				F
Catnip	4509	*Nepeta cataria*	P Z3	1-2'	M B	L	DS DF	M	7-10	Lt	N	F
Chamomile	4511	*Matricaria recutita*	SSA	8-18"	B M	F	DS	M	10-14	Lt	N	F
Chervil	3044ff	*Anthriscus cerefolium*	SSB	12-18"	S	L	DS	W	7-14	Lt	L	P(F)
Chives	4512	*Allium schoenoprasum*	P Z3	1-2'	S M E	L F	DS	C	7-14		L	FP
Cilantro	4517	*Coriandrum sativum*	A	1-2'	S E M	L S	DS	C	7-14		R	F(P)
Codonopsis	4520	*Codonopsis pilosula*	P Z4	5-6'	M O	R	TP	M	7-42		N	P(F)
Cumin	4522	*Cuminum cyminum*	A	1-2'	S M	S	TP	M	7-14	PP		F
Dill	4530ff	*Anethum graveolens*	SSA	2-5'	S M O	S L	DS	W	7-21		R	F
Echinacea	4545ff	*Echinacea spp.*	P Z3	1-3'	M O	R F	TP DW	W	14-21	St Lt	L	F
Elecampane	4549	*Inula helenium*	P Z3	5-8'	M O	R	TP	M	7-10	Lt	N	FP
Fennel	4553ff	*Foeniculum vulgare*	TP/A	1-3'	S M E	L S	DS	M	7-14		R	F
Feverfew	4572	*Tanacetum parthenium*	P Z4	18-30"	M O	L	TP DS	M	7-14	Lt	N	FP
Garlic Chives	4577	*Allium tuberosum*	P Z4	12-18"	S E M	L F	DS	C	7-14		L	FP
Horehound	4580	*Marrubium vulgare*	P Z3	20-24"	M C	L	TP DS	M	10-21		P	F
Hyssop	4582	*Hyssopus officinalis*	P Z3	12-18"	M O	L F	TP DF	C	7-21		R	FP
Joe Pye Weed	5150	*Eupatorium purpureum*	P Z3	5-9'	M O	R	DS DF	M	14-21	St Lt	N	P
Lady's Mantle	4584	*Alchemilla mollis*	P Z3	12-18"	M O	L	TP	M	21-30	St Lt	N	FP
Lavender	4585ff	*Lavandula angustifolia*	P Z5	2-3'	M O	F L	TP DF	W	14-28	St Lt	P	F
Lemongrass	4587	*Cymbopogon flexuosus*	TP/A	3-4'	S B M	L	TP	W	21-42		L	FP
Lemon Balm	4588	*Melissa officinalis*	P Z4	1-2'	B M S	L	TP DS	M	7-14	Lt	N	FP
Lemon Mint	4589	*Monarda citriodora*	SSA	2-3'	B M	L	DS	M	7-21		R	P(F)
Licorice	4590	*Glycyrrhiza glabra*	P Z4	18-48"	S M B	R	DW TP	M	7-28	Sc Sk	L	F
Lovage	4592	*Levisticum officinale*	P Z4	3-6'	S M	L	DS DF	M	10-21		R	F(P)
Marjoram	4616	*Origanum majorana*	TP/A	1-2'	S	L	TP	M	7-21	W	N	F
Marshmallow	4619	*Althaea officinalis*	P Z4	4-6'	M O	R L	DS DF	C	14-21	St	L	FP
Milk Thistle	4630	*Silybum marianum*	SSA	3-5'	M E	S F L	DS DF	M	7-14	Lt	L	F
Mint	4632	*Mentha spicata*	P Z4	12-18"	S B M	L	TP DS	M	7-14	Lt	N	FP
Motherwort	4640	*Leonurus cardiaca*	P Z3	2-4'	M	L F	DS DF	M	7-21	Lt	L	F
Mustard	4642	*Sinapsis alba*	A	2-4'	S E M	S	DS	C	7-10		L	F
Nettle, Stinging	4643	*Urtica dioica*	P Z2	3-6'	E M	L	DS	M	10-14	Lt	R	FP
Oregano, Greek	4648	*Origanum heracleoticum*	P Z4	6-12"	S M	L	TP	M	7-21	Lt	N	F
Oregano, Zaatar	4649	*Origanum syriacum*	TP/A	8-24"	S	L	DS TP	M	7-21		N	F
Parsley	3158ff	*Petroselinum crispum*	B Z3	8-12"	S E M	L	DS DF	M	14-60	Sk	R	FP
Pennyroyal	4651	*Mentha pulegium*	P Z5	8-12"	M O	L	TP	C	10-14		N	FP
Pleurisy Root	4906	*Asclepias tuberosa*	P Z3	18-30"	M O	R	DS DF	M	14-28	St	L	F
Rhodiola	4654	*Rhodiola rosea*	P Z1-5	1-3'	M E	R L	TP	C	14-28	St	P	F
Rosemary	4657	*Rosmarinus officinalis*	TP Z7	3-5'	S M O	L	TP	M	10-42	St Lt	P	F
Rue	4659	*Ruta graveolens*	P Z3	2-3'	M O	L	DS TP	M	10-21		R	FP
Sage	4664	*Salvia officinalis*	P Z4	2-3'	S B M	L	TP DS	W	10-21	Lt	P	F
Sage, White	4666	*Salvia apiana*	P Z6	2-3'	M C	L	TP	W	14-28	W	L	F
Sagebrush, Silver	4668	*Artemisia ludoviciana*	P Z4	1-3'	M C	L	DW	M				F
Salad Burnet	4669	*Sanguisorba minor*	P Z4	1'	E M	L	TP	C	14-28		N	F
Savory, Summer	4672	*Satureja hortensis*	A	12-18"	S M	L	DS	W	7-14	Lt	R	F
Savory, Winter	4674	*Satureja montana*	P Z3	6-12"	S M	L	TP	M	10-21	Lt	N	F
Schisandra	4677	*Schisandra chinensis*	P Z4	15-25'	M E O	B	TP	C	14-60	Sk St	P	P(F)
Shiso	4680	*Perilla frutescens*	TA	2-3'	S M O	L	TP	W	7-14	Sk St Lt	L	FP
Skullcap, Baikal	4681	*Scuttelaria baicalensis*	P Z4	1-2'	M O	R	TP	M	14-21	St	P	F
Skullcap, Mad-dog	4682	*Scuttelaria lateriflora*	P Z4	1-2'	M O	L F	TP	M	14-21	St	P	P
Spilanthes	4683	*Spilanthes oleracea*	TA	8-12"	M O E	F L	TP	W	4-10		P	F
Stevia	4684	*Stevia rebaudiana*	TP/A	24"	S	L	TP DW	W	7-21	Lt	L	FP
St Johnswort	4686	*Hypericum perforatum*	SP Z3	1-3'	M	F L	DS DF	M	14-28	St Lt	N	F
Thyme	4687	*Thymus vulgaris*	P Z4	6-12"	S M	L	TP	C	14-28	Lt	N	F
Valerian	4689	*Valeriana officinalis*	P Z4	3-5'	M O	R	DS	M	10-21	St	L	FP
Vervain	4692	*Verbena hastata*	P Z4	5-6'	M O	R	TP	M	21-28	St Lt	N	F
Woodruff, Sweet	4698	*Galium odoratum*	P Z5	6-8"	O M S	L	DS DF	C	28-200		P	Sh
Yarrow	4699	*Achillea millefolium*	P Z2	1-2'	M O C	F L	DS DF	W	10-14	Lt	N	F

ff=and following



ABP: A=annual, B=biennial, P=perennial, Z=hardiness zone, TA= tender annual, SSA=self-sowing annual, SSB=self-sowing biennial, SP=short-lived perennial, TP=tender perennial, TP/A=tender perennial grown as annual.
height: typical height at maturity.
uses: S=seasoning, M=medicine, O=ornamental, B=beverage, E=edible, C=ceremony.
part: part that is used: S=seed, L=leaf, F=flower, R=root, B=berry.
sow: DS=direct sow in spring ASAP, DW=direct sow when soil has warmed or after danger of frost has passed, TP=transplant, DF=direct sow in fall. Nearly any herb can be started indoors and transplanted, but this tends to be more work; TP means this method is strongly suggested for best results. Many perennials can be started in early summer indoors or out; they take several years to mature anyway, what's a few months?
temp: suggested soil temperatures for good germination: C=cool, 60-65˚, M=moderate, 65-70˚, W=warm, 70-85˚.
days: number of days to seedling emergence.
notes: Lt=needs light to germinate, Sk=soak seed 12-24 hrs, Sc=scarify seed with sandpaper or emery board, W=water sparingly, PP=start in peat pots and take care not to disturb root in transplanting, St=stratify seed; place in moist soil and freeze or refrigerate or alternate between the fridge and freezer. Nearly any herb requiring stratification can be fall-sown in a cold frame—the winter does the work for you!
cover: L=cover lightly, P=pat down gently, R=rake or scuffle into soil, N=no, don't cover.
sun: F=full sun, P=part sun, Sh=shade, FP=prefers full sun but tolerates part, PF=prefers part but tolerates full, P(F)=prefers part, tolerates full only in cool or moist areas, F(P)=prefers full sun, needs part shade in hot climates.

GRAINS

Can sustainable agriculture do its fair share to help feed the world? Yes, if we begin by re-thinking basic paradigms. Most people, if they think at all about wheat, imagine amber waves of grain stretching limitlessly into the Kansas horizon. Or, more practically, they head to the supermarket or their co-op or health food store to purchase a bag of refined flour. That is as close as they get to the most important staple food crop in their diet. Grow it here in Maine in our backyards or on our homesteads?! Impossible, unthinkable, totally impractical! Or so we think. Yet, in the early 1800s Maine was the breadbasket of the United States.

Although some of these annuals are decorative both in form and colors, making great accents for bouquets, wreaths, etc. and worthy of being grown for that reason alone, the revived interest in food security and sovereignty demands more. We offer this section to shatter the myth that these crops demand huge space, that they are difficult to grow, hard to thresh and therefore, uneconomic. With a little ingenuity, none of that is true. For example, with good fertility, proper spacing and reasonable diligence, it is quite possible to harvest 10 lb of heirloom wheat from 100 plants in just a small 10x10' plot, enough for ten loaves of bread. In a 30x30' plot you could harvest enough for two loaves of bread a week for the entire year. As for threshing? For garden or homestead quantities Eli Rogosa suggests cutting the heads off and doing The Twist over them on an upside-down car mat. For larger harvests she graduated to a foot treadle–powered thresher.

A 100' row of rice yields 6–10 lb. And yes, rice can be grown in a garden without flooding or building a paddy. A 100' row of barley yields 2–4 lb, of oats 4–5 lb and of rye 6–7 lb. Grown in rows within beds, grains produce more tillers and more grain with fatter heads.

The selections here are rarely available heirloom varieties especially designed for small- or homestead-scale production. Larger-scale growers and farmers, or those seeking larger quantities of more mainstream varieties, should check out the list in our OGS grasses and grains section beginning on page 120.

Amaranth *Amaranthus hybridus*

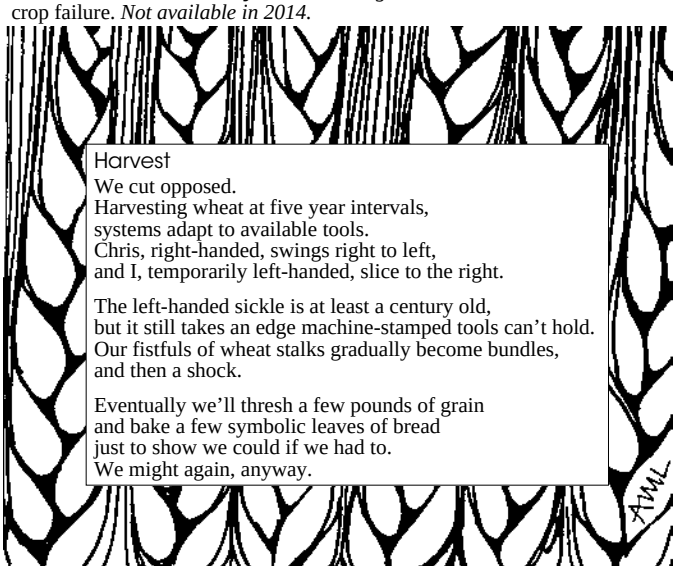
Amaranth was one of the Aztecs' five principal crops. They ground puffed seeds into flour and prepared sauces with the leaves. Amaranthus grain has 14–16% protein. The leaves have three times more vitamin C, ten times more carotene, fifteen times more iron and forty times more calcium than tomatoes, and three times more vitamin C, calcium and niacin than spinach leaves.

See 4831-4137 for ornamental amaranths.

4300OO Opopeo OG (65 days to flower, 125 days to seed) The grain of the gods from Opopeo, Mexico. Doubles as a wonderful green until flower-set. Tom Vigue sows thickly after frost danger, enjoying the bronze-green leaves from 4–6" and the top leaves until the plant reaches a couple of feet. Vigue says, "Never stringy, always tender…a lot more massive than spinach," to which it tastes similar when cooked. Not great raw. Thin as you go to grow grain in the same bed, or start as transplants, which affords a better chance to begin your harvest before the onset of heavy autumnal rains. The huge plants require 2' spacing. Opopeo's magenta purple stems will reach a minimum of 4', with 8' possible, topped by 2' deep burgundy flower spikes each laden with 4–8 oz of seed grain. Grain matures from early to mid October. Cut and hang the heads to dry inside rather than field-curing in wet autumns. Wait until grain is crumbly dry and then rub against a mesh screen to thresh. Store your grain securely; mice love it. Boil two parts water to one part grain for a high-protein gluten-free breakfast cereal or mix with pumpkin meal, vegetables and herbs, allow to harden, and slice into fryable patties. Even Tom's teenaged daughter likes those. Multi-branched plants prone to lodging in loose soils, otherwise may offer support to pole beans when given a head start. WA-certified. ~1200-1500 seeds/g. ①

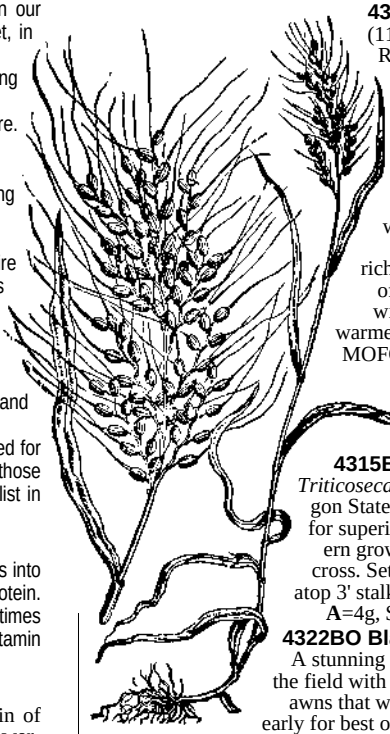
A=1g, $1.60 **B**=4g, $5.00 **C**=16g, $12.00 **D**=80g, $50.00

Burbank Hulless Barley *Hordeum vulgare* Storms in the west caused a crop failure. *Not available in 2014.*


Harvest
We cut opposed.
Harvesting wheat at five year intervals,
systems adapt to available tools.
Chris, right-handed, swings right to left,
and I, temporarily left-handed, slice to the right.
The left-handed sickle is at least a century old,
but it still takes an edge machine-stamped tools can't hold.
Our fistfuls of wheat stalks gradually become bundles,
and then a shock.
Eventually we'll thresh a few pounds of grain
and bake a few symbolic leaves of bread
just to show we could if we had to.
We might again, anyway.
AML

4309TO Terra Hulless Oats OG *Avena nuda* (100 days) Will Bonsall calls this the best of the naked oats, the one to grow to eat. It is probably the earliest as well as the highest yielding with the largest seed. This high-protein grain with pleasing flavor is easier to thresh than most other oats, though it still has a small hull that must be removed. ICS-certified. ~35 seeds/g. ①

A=7g, $1.20 **B**=28g, $4.00 **C**=112g, $10.00 **D**=448g, $25.00



4312RO Duborskian Rice OG *Oryza sativa* (115 days from transplant) Grow rice in Maine! Roberta Bailey acquired this short-grain hardy Russian variety from Seed Savers Exchange member Anpetu Oihankesni of Colorado. Well adapted to dry-land production (no flooding necessary), sturdy plants resist lodging, grow to 20–24" producing 12–18 tillers per plant, each bearing a rice pannicle. Start indoors in 70–85˚ temperatures 4–5 weeks before setting out into warm soil (early June in Maine). Space plants 10–12" apart in rich moist soil and full sun. Heads the first week of August and finishes by late September. Can withstand a light frost. May be direct seeded in warmer regions. Seed crop grown in central Maine. MOFGA-certified. ~35-40 seeds/g. ①

A=1g, $1.80
B=4g, $5.50
C=28g, $28.00
D=112g, $98.00

4315BH Bravehart Spring Triticale *Triticum* x *Triticosecale* Developed for floral arrangements at Oregon State University by Dr. Hal LeFever who selected for superior disease resistance and adaptation to northern growing conditions. A very decorative wheat/rye cross. Sets 4–5" brown heads with medium-long awns atop 3' stalks. Skinny kernels. ~8 seeds/g. ②

A=4g, $1.10 **B**=20g, $2.80 **C**=60g, $6.50

4322BO Black Eagle Spring Wheat OG *T. aestivum* A stunning dual-purpose spring wheat, standing 3' tall in the field with black and white glumes and crisp 3–4" black awns that wowed Nikos the first time she saw it. Harvest early for best ornamental value as its striking color weakens the longer the plants stand in the field. Later, as the kernels fill out and redden, gather the sheaves to thresh, winnow and bake. A 6-row wheat with good straw strength and average yield. Seed originated from Thumbs Heath of the Seed Savers Exchange. ID-certified. ~23 seeds/g. ① **NEW!**

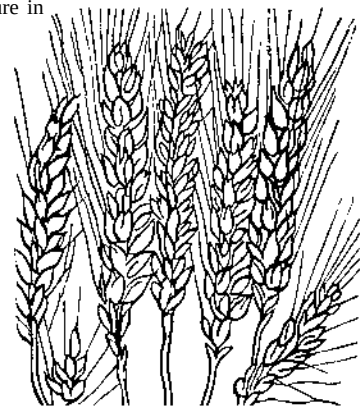
A=7g, $1.20 **B**=28g, $3.00 **C**=112g, $5.00

4324UO Utrecht Blue Spring Wheat OG *T. durum* Wheat is the most widely cultivated plant in the world and this may be the world's most beautiful wheat (though wheat's forerunner Black Emmer would give it a run for the money). It hardly matters that Utrecht Blue is hard to thresh because it is too beautiful to eat and is used instead for wheat weaving and flower arrangements. Features four rows with blue-grey husks and long black awns. Utrecht is a spring wheat, meaning sow it in April for harvest in September rather than planting in autumn and wintering it over. OT-certified. ~19 seeds/g. ①

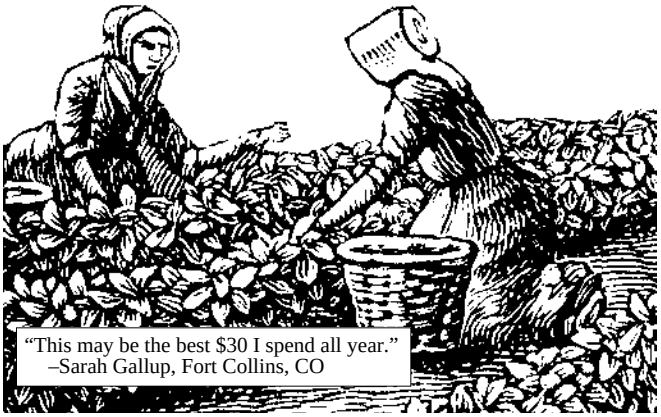
A=4g, $1.40 **B**=20g, $4.80 **C**=100g, $13.00

4329BK Banatka Winter Wheat ECO *T. aestivum* We are thrilled to offer this elite winter wheat bred by Eli Rogosa from two superior heritage Eastern European landraces: Ukrainka (originally from Banat, Hungary) described by Russian plant explorer Nikolai Vavilov in the late 1930s as having "high productivity, broad adaptability and excellent baking quality," and Bankuti, beloved for its rich flavor. Had the highest yield in three years of SARE-funded organic wheat trials at U. Mass. See growseed.org for details. In early September, plant each seed 8" apart, 12 lb per acre for the best yield. Wide spacing produces a deep root system that brings up moisture during drought and strengthens the plants during torrential rains for better climate resilience. Undersow with clover to suppress weeds. Harvest for flour when the chest-high plants are greenish-brown or for seed when they are brown, dry and fully mature in mid-late July. ~20 seeds/g. ①

A=2g, $2.20
B=4g, $4.20
C=14g, $11.00
D=28g, $20.00



Interested in heritage grains such as Rouge de Bordeaux, Einkorn, Emmer and more? CR Lawn and Eli Rogosa were funded by SARE to trial world heritage grains to increase on-farm diversity and climate resilience. For resources to restore heritage wheat best-adapted to New England visit **growseed.org**.



"This may be the best $30 I spend all year."
–Sarah Gallup, Fort Collins, CO

HERBS

See chart on page 84 for uses and cultural information. A botanical index appears on page 109.

Archeological evidence dates the medicinal use of herbs back 60,000 years to the Neanderthals. 85% of the world's population employ herbs as medicines, and 40% of pharmaceuticals in the U.S. contain plant-derived materials. Fewer than 10% of the 100,000 known higher plant species have been investigated yet for their medicinal components. Interest in traditional herbal home remedies continues to grow. Consult herbals for more detailed information.

#**2300** Takinagawa Burdock**,** #**4925** Resina Calendula, as well as oats, mammoth red clover and alfalfa in the cover crops section also have medicinal uses. Some medicinal herbs such as black cohosh are available as rootstock from our Trees catalog. Some herbs are customarily grown from divisions or cuttings because they cannot come true from seed, such as scented thymes and flavored mints; some require fall sowing of fresh seed, such as sweet cicely and angelica. (Both are available online in Aug. and Sept.)

To use fresh herbs in cooking, triple the dried quantity called for in a recipe. Drying herbs at home is not difficult. Whole leaves retain their flavor longer than those crumpled or powdered. The flavor should last at least a year.

Statements about medicinal use of plants have not been evaluated by the FDA, and should not be used for the diagnosis, treatment, cure or prevention of any ailment. Before using or ingesting any medicinal plant, consult a healthcare practitioner familiar with botanical medicine.

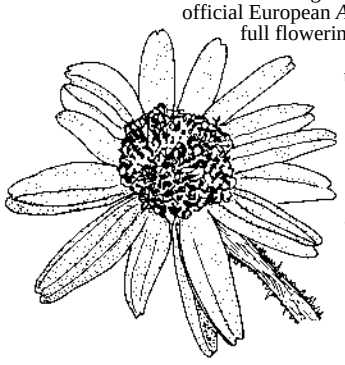
4406AN Anise *Pimpinella anisum* Annual bears seeds with subtle licorice overtones and a spicy warming flavor. Drunk as a tea in the Middle East. Used in baking, an essential ingredient in Springerle. Anise helps ease indigestion, gas and colic, also relaxes dry tight coughs. Plant in average-to-rich well-drained warm soil in full sun after danger of frost. Sets small white umbel flowers in July. Seed ripens in August and September. 1–3' tall. All seed is held over. ~200 seeds/g. ③

A=0.5g, $1.00 **B**=2g, $2.40 **C**=8g, $5.00 **D**=40g, $12.00

4407AO Anise Hyssop OG *Agastache foeniculum* Bushy midwestern native permeates the air with sweet licorice fragrance. An outstanding insectary plant, its long-blooming nectar-laden purple flowers attract bees and parasitic wasps, butterflies and hummingbirds. Anise-scented foliage and flowers delightful as a tea or culinary seasoning, or filler in mixed bouquets. The tea induces sweating and strengthens the heart, was used also for fevers, colds, and by Native Americans as a cough medicine. Sow or transplant 1–1½' apart in well-drained warm loam. Perennial can grow 3' tall, 2' wide. Vigorous self-sower. Not related to anise or hyssop. Zone 4. OEFFA, MT-certified. ~2,600 seeds/g. ①

A=0.2g, $1.10 **B**=1g, $2.40 **C**=5g, $5.50 **D**=25g, $14.00

4409RO Arnica Chamissonis OG *A. c.* Meadow arnica is a native American species that will grow successfully in low-elevation gardens. *A. chamissonis* has been tested and is generally accepted as a substitute for the official European *A. montana.* Use the yellow flowers at full flowering either fresh or dried, in compresses and salves as an external remedy on unbroken skin to reduce swelling and bruising caused by traumatic injury, and on arthritic joints. 20" perennial yields well with multiple flower stalks blooming for most of the early season. Stratify seed and give it light to germinate. Start indoors and transplant into humus-rich soil in full sun. Zone 3. WA, MOFGA-certified. ~2,500 seeds/g. ①



A=0.02g, $1.30 **B**=0.1g, $3.00

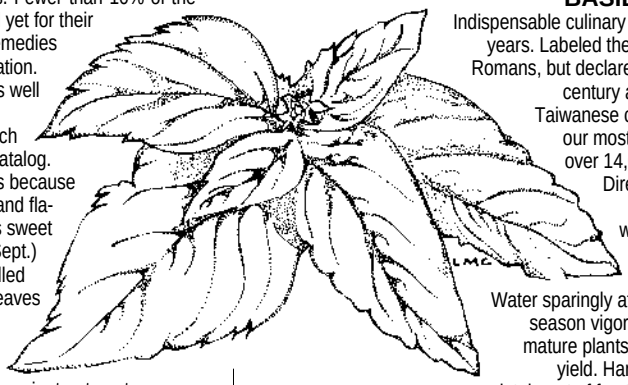
4411WO Ashwagandha OG *Withania somnifera* In Sanskrit its name means 'the vitality of the horse' and it imparts such energy; *somnifera* promotes sleep. An herb of wide value, generally known as the ginseng of Ayurvedic medicine. Upright shrub exceeds 2' with inconspicuous green-to-yellow flowers ripening to red berries. Roots are dried at the end of the growing season and used internally powdered or tinctured (other plant parts are toxic if eaten). Herbalist Deb Soule harvests the roots when the berries ripen in mid-October. Her delightful new book, *How to Move Like a Gardener*, (**9725** in the book section) has more details about ashwagandha. One of the best rejuvenators, especially good for the elderly, it tones without overstimulating and can be used in all conditions of weakness and chronic debilitation. Needs warmth and light to germinate. Sow indoors in the spring and transplant out in June; prefers dry stony soil in sun or partial shade. Perennial in Zone 10, grown as an annual here in the north. OT-certified. ~1,000 seeds/g. ②

A=1g, $1.60 **B**=4g, $5.50 **C**=12g, $15.00

4412AS Astragalus *A. membranaceus* Safe effective adaptogenic tonic to use daily throughout the year, aiding digestion and promoting immune system health (*wei qi*). Called *huang qi* in Chinese and Chinese Milk Vetch Root in English. Especially good for vegetarians. Also used in cases of exhaustion, food allergy or depression, and to increase assimilation, improve digestion, and eliminate excess fluids. Small pea-like flowers on upright stems with vetch-like leaves. 1½–4' perennial. Plant in deep well-drained slightly alkaline soil. Harvest 4- to 6-year-old roots in the fall. Zone 4. ~50 seeds/g. ①

A=0.5g, $2.10 **B**=3g, $12.00 **C**=9g, $32.00

BASIL *Ocimum basilicum*



Indispensable culinary herb, in cultivation for more than 3,000 years. Labeled the "insanity plant" by ancient Greeks and Romans, but declared the Royal Herb of France in the 16th century and named 2003 Herb of the Year. The Taiwanese call it 'nine-storied tower.' Basil is by far our most popular herb, the various kinds selling over 14,000 packets in each of 2012 and 2013. Direct seed when soil warms in late spring or transplant after danger of frost in well-drained moderately rich soil. Young seedlings will damp off if heavily watered during cool cloudy weather. Water sparingly at first. Use row covers to enhance early season vigor and speed maturity. Thin to 8–12", top mature plants to induce branching and increase total yield. Harvest before plants blossom. Absolutely intolerant of frost, damaged by temperatures in the 30s. Research from Southwestern University in Texas showed that basils in low-nitrogen soils had less vigorous growth but higher contents of polyphenolic compounds that may help prevent many diseases and cancers.

Where so indicated our varieties have been sampled and found to be fusarium-free. While not a guarantee that the entire lot is fusarium-free, a negative test improves the odds. No samples were taken for varieties not so indicated. **~600 seeds/g.**

Sweet (70 days) The heaviest-yielding variety, recommended for drying, all-around great eating, and large-scale pesto production. We sold more than 5,800 packets last year of these two strains of Sweet Basil.

4414SB Sweet Genova strain. Tested for fusarium. ⑤

A=4g, $1.20 **B**=28g, $4.20 **C**=112g, $10.00 **D**=336g, $25.00

4415WO Sweet OG WA, CCOF-certified. ③⑤

A=4g, $1.70 **B**=28g, $6.50 **C**=112g, $17.00 **D**=336g, $40.00

4418GB Genovese (70 days) The choice of many connoisseurs for making pesto. Also called Perfumed Basil. Leaves are slightly smaller and finer than Sweet Basil with more aroma and potency. ②

A=2g, $1.00 **B**=10g, $2.20 **C**=40g, $5.50 **D**=160g, $12.00

4422MB Mammoth No grape leaves available? Lettuce-leaf type has very large ruffled leaves suitable for rolling or stuffing. Flavor similar to sweet basil. Give plenty of space per plant so leaves can dry out after wet spells. However, the smaller types are easier for drying. ②

A=1g, $1.10 **B**=7g, $2.60 **C**=28g, $8.00 **D**=84g, $15.00

4430SG Spicy Globe *O. b. minimum* (70 days) Marvelous little basil grows to about 8" and maintains a compact mound of light green leaves and white flowers. Its leaves are small, thin and strongly scented. Great as an ornamental border, in a windowbox, or as an indoor potted plant that can be snipped for culinary use. ②

A=0.5g, $1.30 **B**=5g, $2.50 **C**=15g, $6.00 **D**=60g, $15.00

4436AB Anise Originally from Persia. Vigorous mulberry-tinted basil with anise fragrance makes highly decorative tall bushy plant. Slow to bolt. Great in Italian tomato sauces. Also used in Thai and various Mediterranean cuisines. ②

A=0.5g, $1.20 **B**=7g, $2.80 **C**=28g, $6.00 **D**=84g, $14.00

4441RO Aromato OG Dramatic bicolor ornamental. Broad bushes of mottled purple and green grow to 2½', providing a focal point. Starts purple and takes on a greener coloration. Pleasing anisey flavor and scent intensify when it is dried. Makes a great herbal vinegar. AGRIOR-certified. ③

A=0.5g, $1.30 **B**=3g, $2.50 **C**=12g, $6.00 **D**=36g, $15.00

Spice Boys Cinnamon *Not available in 2014.*

4448LO Lemon OG *O.b. citriodorum* Basil often used in bouquets for its intense lemon fragrance. Not as vigorous as #**4449** Sweet Dani and more vulnerable to blight, but has a stronger truer lemon flavor. Great in fish and fowl dishes. Native to Thailand and Southeast Asia and featured in those cuisines. All seed is held over; germinates at 80%. CCOF-certified. ③
A=0.5g, $1.20 **B**=4g, $2.50 **C**=16g, $6.00 **D**=48g, $14.00

4449SD Sweet Dani Lemon (65 days) 1998 AAS for its extraordinary vigor that manifests even in the seedling stage and continues through the summer. Tall upright plant reaching almost 30" is 2–3 times as vigorous as #**4448** Lemon basil with heavier yields of large light green leaves. Does not need coddling. Tested for fusarium. ⑤
A=0.5g, $1.60 **B**=1.5g, $3.20 **C**=4.5g, $7.50 **D**=13.5g, $19.00

4450BB Mrs. Burns Lemon (64 days) Chosen for its intense lemony fragrance. Medium-sized bright green leaves. Heirloom variety grown for 60 years in southeastern New Mexico, first offered commercially by Native Seeds/Search, has now achieved nationwide fame. ③
A=0.5g, $1.20 **B**=4g, $2.80 **C**=20g, $7.00 **D**=60g, $16.00

4453LO Lime OG *O. americanum* (65 days) Imparts a robust lime fragrance to the patch. More vigorous than lemon basil, darker green leaves with a strong lime flavor. CCOF-certified. ③
A=0.25g, $1.30 **B**=1g, $3.00 **C**=4g, $5.00 **D**=16g, $9.00

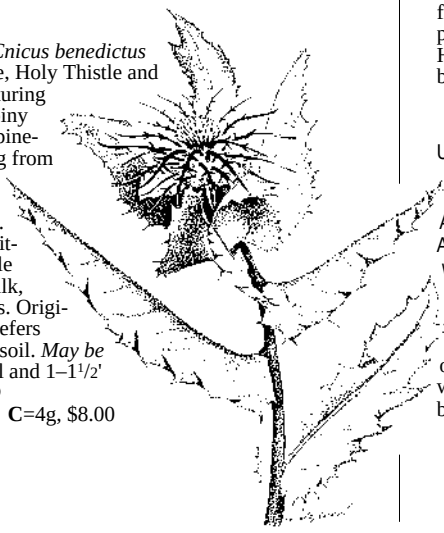
4456RR Red Rubin (78 days) The original strain, with fewer green-leaf throwbacks. More vigorous than Purple Ruffles. Highly ornamental dark purplish-bronze foliage. A salad of purple basil leaves and yellow tomatoes provides a stunning color contrast. Tested for fusarium. ⑤
A=0.5g, $1.40 **B**=2g, $3.20 **C**=10g, $8.00 **D**=30g, $20.00

4461PR Purple Ruffles (85 days) Deep purple plants with serrated and crinkled leaves for striking visual contrast in the herb garden. Imparts attractive color to basil vinegars. Not a vigorous grower in our climate but will reach a height of 18" in peak summer heat. Some plants will have green foliage and in some the green will be mixed with purple. 1987 AAS. PVP. ⑤
A=0.25g, $1.60 **B**=1g, $3.20 **C**=4g, $7.00
D=12g, $18.00

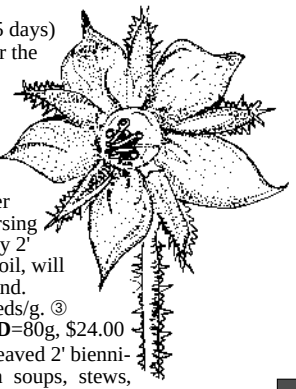
4467BO Sacred OG *O. tenuiflorum* (100 days) Native to India and used in Indian as well as Thai cuisine. Spicier than other basils and quicker to go to seed, but still usable when covered with purple flowers. Used in Ayurvedic medicine as a poultice on acne, ringworm, eczema and insect bites. Strengthens the immune system and increases oxygen uptake in the brain. Stands a bit more cold than other basils. OT-certified. ①
A=0.1g, $1.20 **B**=1g, $2.50 **C**=7g, $7.00 **D**=21g, $15.00

4470TB Thai (60 days) Lends its distinctly strong licorice-anise basil flavor to Thai food. An attractive 12–18" fine-leaved plant with purple stems, seed heads and flowers. Good container plant as well. ②
A=0.5g, $1.20 **B**=4g, $2.80 **C**=12g, $5.50 **D**=36g, $12.00

4481WO Wild Bergamot OG *Monarda fistulosa* Our native wildflower species of the familiar bee balm is a great addition to the perennial border in light dry alkaline soils. The 3–4' plants bear aromatic lavender blossoms highly attractive to pollinators. Leaves impart pungent aroma to teas, potpourri, meats and beans. Traditionally used as an aromatic stimulant to improve digestion and increase perspiration. Native Americans employed it internally to combat colds and flus and externally to calm skin eruptions. Zones 3-9. MOFGA-certified. ~2,000 seeds/g. ①
A=0.1g, $1.20 **B**=0.4g, $2.80 **C**=2g, $6.00



4484HO Blessed Thistle OG *Cnicus benedictus* Also known as St. Benedict Thistle, Holy Thistle and Sacred Thistle. A hairy annual featuring branched bristly red stems, long spiny leaves with sinuate margins, and spine-encircled yellow flowers, blooming from July through September. Its leaves, flowers and roots are edible, the latter boiled as a vegetable. Used as a liver tonic or digestive bitter; said to stimulate gastric and bile secretions, to improve mother's milk, and to rectify hormonal imbalances. Originally from the Mediterranean, it prefers warm dry sunny locales with poor soil. *May be emetic in large doses.* Grows 2' tall and 1–1½' wide. OT-certified. ~40 seeds/g. ②
A=0.25g, $1.50 **B**=1g, $3.00 **C**=4g, $8.00



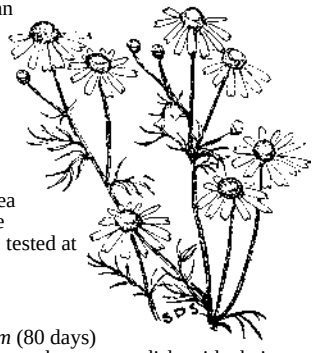
4491BO Borage OG *Borago officinalis* (55 days) Gloria Seigars suggests it as a great border for the vegetable garden where the dense plants smother weeds and attract bees. Bears many small flowers that open blue, turn purple and then pink and make colorful additions to salads. Enjoy the cooling properties of very young leaves on a hot day. Used in cough syrups or frozen in ice cubes to lend cucumber flavor to cold drinks. A nourishing tea for nursing mothers. Seeds a good source of GLAs. Bushy 2' annual likes sun, prefers moist well-drained soil, will self sow. Young plants are easy to move around. Survives light frosts. CCOF-certified. ~50 seeds/g. ③
A=0.5g, $1.10 **B**=4g, $2.80 **C**=16g, $8.00 **D**=80g, $24.00

4507CW Caraway *Carum carvi* Feathery-leaved 2' biennial grown primarily for its seeds to season soups, stews, breads and pastries. Its leaves are also edible, though milder than the seeds. Direct seed either in early spring or late summer for seeds the second year. Likes full sun, sandy well-drained soil. Will self-sow. Zones 3-9. All seed is held over. ~350 seeds/g. ②
A=0.5g, $1.00 **B**=7g, $2.20 **C**=28g, $5.00 **D**=112g, $11.00

4509NP Catnip *Nepeta cataria* (85 days from transplanting) "If you set it, the cats will get it; if you sow it, they won't know it." Hardy perennial, will self-sow once established. Likes rich or sandy soils, tolerates poor soil and drought. Calms mild stomach disorders, produces restful sleep and relieves fever when added to teas. Tovah Martin writes that rats are reputed to despise it, so it is sometimes used as a companion plant for melons and squashes. Researchers at Iowa St. U. claim catnip is a top-notch mosquito repellant. They suggest rubbing crushed catnip leaves on the skin is several times more effective than using DEET. Zones 3–8. ~1,400 seeds/g. ②③
A=1g, $1.00 **B**=7g, $2.50
C=28g, $6.00 **D**=112g, $13.00

Lemony Catnip *N. c. citrodoria* Dropped for slow sales; *no longer available.*

4511BG Bodegold Chamomile *Matricaria recutita* (65 days) Annual, likes moist well-drained soil, and can be direct seeded or transplanted. Upright 18–24" plants are higher yielding than German chamomile. This tall variety is easy to harvest. Its sweet delicate aromatic blossoms were opening only three days after Donna Dyrek set it out in June and put on a full show by July 1. Fading in August's heat, they revived with the first autumnal rains. Flower heads are ready to gather when the petals fall back from the center. Try using a blueberry rake to harvest them. Chamomile tea calms nerves, soothes the stomach and can be sleep-inducing. No new crop; held over seed, tested at 60%, is in short supply. ~1,750 seeds/g. ③
A=1g, $1.40 **B**=3g, $2.80



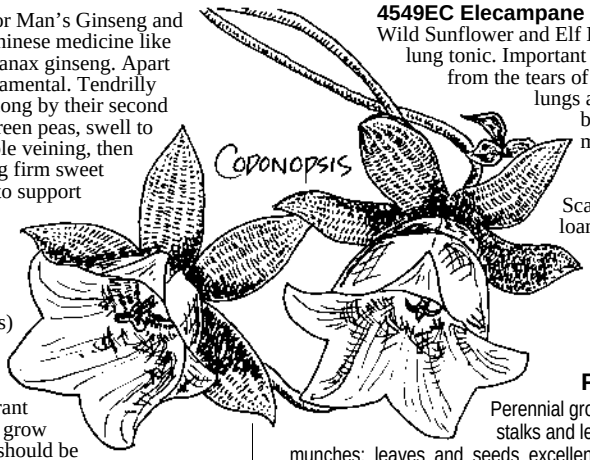
Chervil see #**3044**-**3045**.

4512CO Chives OG *Allium schoenoprasum* (80 days) Hardy perennial. 1–2' hollow grasslike leaves enhance any dish with their subtle onion flavor, providing a fine treat in very early spring. Lilac-colored flowers bloom in June and July, can be eaten or enjoyed in arrangements fresh or dried. Used in Asia as a remedy for colds and flu. For best production, grow in well-drained soil and divide clumps every few years. However, nearly indestructible even with neglect in extreme conditions. Can be brought inside for the winter. Zone 3. CCOF-certified. ~900 seeds/g. ③
A=0.5g, $1.20 **B**=7g, $3.00 **C**=28g, $7.50 **D**=112g, $23.00

CILANTRO *Coriandrum sativum*

Useful for its fresh green foliage, its edible flowers which attract many beneficial insects, and coriander—its dried seeds. Produces leaves in generous quantity, essential flavoring in Indian, Chinese, Southeast Asian, North African and Latin American cooking. Accentuates soups, salsas and bean dishes like no other herb. Annual grows to 2' with whitish blooms. Make succession plantings in average well-drained soil and keep watered for lushest leaf production. Thin early. In warm locations will stand longest as a fall crop. Jason Kafka harvests for market by yanking out whole plants. **~60 seeds/g.**

4517RO Caribe OG (55 days) The best of the ten strains of cilantro in our trial. Received high marks from trialer Heron Breen as "hardworking with lots of excellent eating foliage and great flavor." Longstanding; was barely beginning to flower on July 9. OT-certified. ④
A=1g, $1.00 **B**=4g, $2.50 **C**=28g, $5.00 **D**=112g, $15.00
E=448g, $48.00



4520CD Codonopsis *C. pilosula* Also called Poor Man's Ginseng and *dang shen* in China. Perennial to Zone 4. Used in Chinese medicine like ginseng, but considerably easier to grow than true Panax ginseng. Apart from its medicinal value, fun to grow as a novel ornamental. Tendrilly twining vines with small ovate leaves grow to 3–4' long by their second year. Mature vine about 5–6' long. Buds look like green peas, swell to little green balloons, flower as green bells with purple veining, then mature to five-sided-balloon seed pods. Harvest long firm sweet roots with tight skins in autumn at 4–6 years. Used to support energy levels, digestion, immune response, and to clear excess mucus from the lungs. Full sun to part shade, well-drained soil. ~3,700 seeds/g. ② **NEW!**
A=0.02g, $2.00 **B**=0.06g, $5.00
C=0.18g, $12.00

4522CU Cumin *Cuminum cyminum* (100-115 days) After black pepper, the most widely used spice in the world. This is the culinary cumin whose seeds are important in flavoring Mexican and Indian cuisine and are said to aid digestion. Foliage is fragrant and ferny, somewhat like dill, but unlike dill, plants grow only 6–12". Annual, takes a long time to mature so should be started indoors in cold climates. Our thanks to Lee Cooper for suggesting that we spice up our herb selection with cumin. ~300 seeds/g. ②
A=0.5g, $1.00 **B**=1g, $2.00 **C**=6g, $4.00 **D**=30g, $6.00

DILL *Anethum graveolens*

Name derived from the Norse *dilla*, meaning 'to lull,' as the plant is said to have soothing properties. Best known in this country for pickling, but essential for Russian, Polish and Hungarian cuisine. Annual, sometimes classed as biennial, grows to 4'. Upright plant branches out from single stalk; the feathery leaves known as dill weed. Likes well-drained moderately rich soil. **~500 seeds/g.**

Bouquet Bouquet is usually grown for dill weed production because its leaves are sweeter and more refined than those of Mammoth. Foliage should be harvested early, before seed stalks mature.

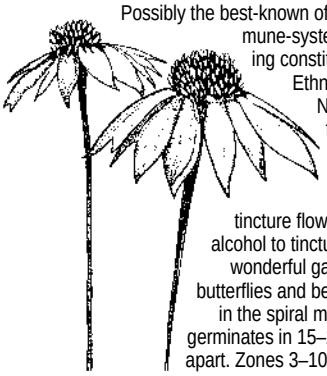
4530BU Bouquet (55 days) The biggest, best and ferniest strain of the four in our lot grow-out. ②
A=4g, $1.10 **B**=28g, $2.80 **C**=224g, $11.00 **D**=448g, $19.00

4531BO Bouquet OG (55 days) CCOF-certified. ③
A=2g, $1.20 **B**=8g, $2.40 **C**=40g, $5.00 **D**=200g, $12.00

4536FL Fernleaf (55 days) 1992 AAS. A dwarf variety suitable for small gardens or patio containers, Fernleaf grows only half as tall as other varieties and is very slow to go to seed. One September, most of our May planting had not yet bolted, and its abundant piquant foliage was still suitable for harvesting. Multi-branching plants spread 18–24". PVP. ⑤
A=0.5g, $1.60 **B**=1.5g, $3.00 **C**=4.5g, $5.50 **D**=13.5g, $14.00

4542MM Mammoth Variety generally grown for its seeds. Can also be used as dill weed, but the foliage is slightly darker, coarser and stronger-tasting than that of Bouquet. Otherwise, differences between the two in plant height and habit are barely discernible. ②③
A=4g, $1.10 **B**=28g, $2.80 **C**=224g, $11.00 **D**=448g, $19.00

ECHINACEA spp.



Possibly the best-known of the medicinal herbs, widely used as an immune-system stimulant. Species contain slightly differing constituents, but all are antibacterial and antiviral. Ethnobotanists have identified at least 14 native North American nations that used Echinacea for similar purposes: sore throat, toothache, infection, wounds, snake bite and skin disorders, as well as hair combs and children's toys. Joanna Linden likes to tincture flowers and leaves in August and use the same alcohol to tincture seeds and third-year roots in October. A wonderful garden perennial: late summer blooms attract butterflies and bees and make good cutflowers; dew collects in the spiral mandala coneheads. Start indoors at 70–75˚, germinates in 15–20 days. Grow on at 60–65˚. Set out 18-24" apart. Zones 3–10. **~250 seeds/g.**

4545NL Narrow-Leaved *E. angustifolia* Smallest and least vigorous of all the Echinacea species, but the one with the most medicinal tongue-tingling properties. Small taproots can be difficult to harvest. Overharvesting in the wild by zealous collectors has endangered this species, so cultivate some for your use. Short rose-pink petals, spreading and toothy. Tapered hairy leaf. 6–20" tall. Native to prairies west of the Mississippi, Saskatchewan to Texas. Herbalist Richo Cech suggests stratifying seeds for 30 days. ③
A=0.5g, $1.40 **B**=1.5g, $3.50 **C**=6g, $7.50 **D**=24g, $24.00

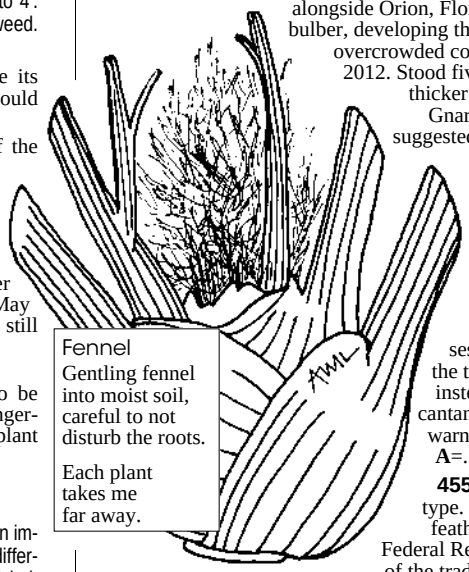
4547CO Purple Coneflower OG *E. purpurea* Large, showy, vigorous and hardy, a popular garden perennial since the early 1700s. Large fibrous roots are easy to harvest. Though not a mix, the colorful flowers vary from rose to lavender to purple. Long downward-curving petals around large spiny centers. Broad toothed leaf. Easy-to-grow, 2–4' tall, native to a wide range of habitats, from Appalachian woods to midwest prairies. Often self-sows. OEFFA, OT, MOFGA-certified. ①②
A=1g, $1.30 **B**=4g, $3.00 **C**=16g, $6.50 **D**=48g, $15.00

4549EC Elecampane *Inula helenium* Also known as Horseheal, Wild Sunflower and Elf Dock. Large dramatic plant is an excellent lung tonic. Important to the ancient Greeks, said to have sprung from the tears of Helen of Troy. Mucilaginous root relaxes lungs and helps clear mucus, calms cough. Antibacterial and antifungal, also used for asthma, bronchitis, cough and flu, especially in children. Helpful for scabies, herpes and other skin disorders (an old name is Scabwort). Plant in heavy moist well-drained loam with generous helpings of compost. Dig root in mid fall. 5–8' perennial with 2–3" bright yellow rayed flowers, blooming May to August. Zone 3. Heldover seed germs at 81%. ~1,600 seeds/g. ②
A=0.1g, $1.50 **B**=0.3g, $3.20
C=1.2g, $6.50 **D**=3.6g, $12.00

FENNEL *Foeniculum vulgare*

Perennial grown as an annual with a licoricey taste. Tender stalks and leaves are good for relishes, salads and garden munches; leaves and seeds excellent with fish. May also be grilled, sauteéd or steamed. Seeds used in sweets, baked goods & beverages. Aids digestion while reducing flatulence. Can soothe bronchial coughs. Fennel prefers rich well-drained slightly limey soil. Direct seed in late April or early May. *Do not allow to dry out.* Hardy to under 20˚.

4553PO Perfection Fennel OG (72 days) Open-pollinated. The acme of Perfection in bulbing fennel, and a good performer in cool soils. Trialed alongside Orion, Florence and Zefa Fino, it was the best bulber, developing the fewest high narrow stalks even in overcrowded conditions in the very warm spring of 2012. Stood five days longer than Zefa with much thicker bulbs. Our thanks to Eric Schori of Gnarlwood Farm in Lempster, NH, who suggested Perfection. "We may not have the long springs and Willamette River silts of Corvallis, OR, but I've seen Perfection large enough to be used to subdue an ornery moose. I haven't gotten it that big here in the Northeast, but it still makes a superb bulbing fennel even at more modest sizes. Sautée with onions, yellow peppers and a little toasted sesame oil and you may [succumb to] the temptation to keep it all for yourself instead of taking it to market." Maine's cantankerous moose: consider yourselves warned! CO-certified. ① **NEW!**
A=.5g, $1.60 **B**=3g, $4.50



Fennel
Gentling fennel into moist soil, careful to not disturb the roots.

Each plant takes me far away.

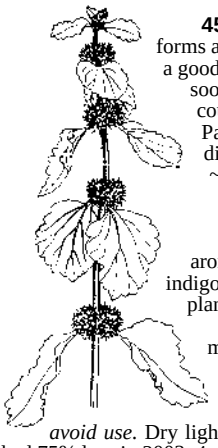
4556ZF Zefa Fino (65 days) Bulbing type. 3' with edible blue-green stems and feathery green leaves. Bred at the Swiss Federal Research Station. Compared to some of the traditional Italian varieties, much more resilient under stress and much less likely to bolt. A spring planting will stand till late summer. We advise a second sowing in July for crisp juicy bulbs till October. Thin to approximately 12" apart in 18" rows; *overcrowding induces premature bolting.* ~200 seeds/g. ③
A=0.5g, $1.20 **B**=3g, $3.00 **C**=9g, $7.00 **D**=27g, $15.00

4567BO Bronze OG (65 days) Slow grower with very thin stems valued for its striking feathery bronze foliage. Delicious and decorative. An intriguing addition to mesclun and to flower beds. OT-certified. ~375 seeds/g. ①
A=0.2g, $1.20 **B**=0.6g, $2.50 **C**=3g, $6.00 **D**=30g, $15.00

4572FO Feverfew OG *Tanacetum parthenium* Strongly scented bushy plant with beautiful daisy-like white blooms good in bouquets. A tea from the chrysanthemum-like leaves was traditionally used as a relaxant. Chewing regularly on a bitter leaf or two is said to prevent migraines. Sow indoors, set out in average well-drained soil when seedlings have four true leaves. Perennial to Zone 4, maybe 3. Will self-sow. WA-certified. ~5,000 seeds/g. ①
A=0.1g, $1.50 **B**=0.4g, $3.20 **C**=2g, $8.00

4577GC Garlic Chives *Allium tuberosum* (90 days) Also called Chinese chives or Chinese leeks. Known as *jiu cai* in China. Grows like chives, 1' tall, but has flat strap-like leaves that taste like garlic and can be used as a garlic substitute in salads and sautéed vegetables. White flowers are edible, long-lasting in bouquets and good in dried arrangements. Sow thinly in spring, harvest sparingly till plants are established; after that they are vigorous and self-sowing. *Seed is very short-lived.* Perennial, but protect in cold areas. Easier than chives to bring indoors for winter. Zone 4. ~210 seeds/g. ③
A=0.5g, $1.20 **B**=14g, $3.20 **C**=56g, $9.00 **D**=168g, $24.00

"I…just…can't…stop…ordering…!"
–Georgie Smith, Willowood Farm, Coupeville, WA



4580HH Horehound *Marrubium vulgare* Perennial forms a 2' bushy stand of grey-green wooly leaves, making a good border. Horehound candies were once common for soothing coughs and the tea makes a strong remedy for coughs and lung congestion. One of the bitter herbs of Passover. Transplant while seedlings are still small or direct seed into light dry sandy soil. Hardy to Zone 3. ~950 seeds/g. ②

A=0.2g, $1.10 **B**=1g, $2.80
C=4g, $6.00 **D**=12g, $12.00

4582HY Hyssop *Hyssopus officinalis* Beautiful aromatic perennial border plant that produces spikes of indigo flowers, traditionally used in cough syrups. Can be planted with rosemary and lavender for a colorful and fragrant effect. Its aroma stimulates alertness and mental clarity. Was used as a strewing herb, thrown on floors to mask odors. Add slightly bitter leaves to salads, soups and stews, or use as an expectorant tea. *People with epilepsy and pregnant women avoid use.* Dry light or sandy soil. Normally hardy to Zone 3, but we had 75% loss in 2003–4. ~850 seeds/g. ②

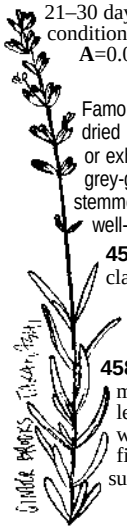
A=0.5g, $1.10 **B**=4g, $2.80 **C**=16g, $6.50 **D**=48g, $13.00

4584LM Lady's Mantle *Alchemilla mollis* I first admired this attractive plant in the lovely gardens at Avena Botanicals. Softly hairy wavy-edged leaves unfold like fans in early spring. Leaves hold rain and dew, sparkling in the early morning light. Alchemists believed the collected dew was the purest water and used it in their preparations; thus its genus name. Bears large loose sprays of tiny greenish-yellow flowers from early summer onward. Makes a good border and ground cover in shady locations. Astringent and regenerative, has a long history as a remedy for women. Seed is short-lived. Oscillating temperatures aid germination which requires 21–30 days. Likes average well-drained soil and moisture; tolerates most conditions. 12–18" hardy perennial. Zone 3. ~2,600 seeds/g. ③

A=0.05g, $1.20 **B**=0.2g, $2.80 **C**=1g, $6.50 **D**=4g, $13.00

LAVENDER *Lavandula angustifolia*

Famous for centuries for its sweet soothing lasting scent. Flowers used dried in sachets, wreaths and arrangements, and as a tea for headache or exhaustion. Hardy perennial reaching 3', woody shrublike plant with grey-green needle-like foliage and lavender flowers growing on long-stemmed spikes. Attracts small pollinating insects and syrphid flies. Likes well-drained alkaline sandy soil. Germinates in 21 days at 60–70˚.



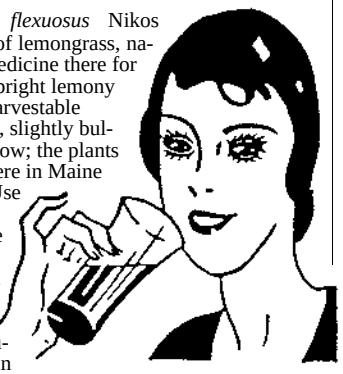
4585LV Lavender *L. a.* Also known as English lavender. Texts claim hardy to Zone 5, but our patch in Zone 3 survived ten straight winters until the nasty one of 2003–4. ~1,000 seeds/g. ②

A=0.2g, $1.10 **B**=1g, $2.80
C=5g, $6.50 **D**=20g, $12.00

4586VB Vincenza Blue *L. a.* More compact habit than common lavender with deeper green leaves and a more powerful, less sweet, aroma. 1' plants have bold clustered flower spikes with deep color from mid-July to early September. Flowers the first year without vernalization. Long-day perennial needs full sun. Zone 5. ~1,000s/g. ②

A=0.03g, $2.00 **B**=0.12g, $5.60 **C**=0.6g, $21.00

4587LG Lemongrass *Cymbopogon flexuosus* Nikos searched for years for this culinary strain of lemongrass, native to Southeast Asia, used in food and medicine there for millennia, and adopted worldwide for the bright lemony flavor it imparts. Coarse grass sets 6–12 harvestable stalks, looking something like pencil leeks, slightly bulbous at the base. Harvest the tough stalks low; the plants will re-grow, though probably only to 3' here in Maine rather than the 6' achieved in the tropics. Use chopped or ground, fresh, dried or frozen, add to soups, sauces and stir-fries, or make into a delicious medicinal tea to aid digestion. Holli Cederholm reports that it's well worth growing for market: her customers raved about its quality compared to the supermarket's, and a caterer bought it regularly for infusing mixed drinks. Perennial in Zones 9-11, grown as an annual in our climate unless potted up and brought indoors for the winter. Not a great germinator; 40% is considered good. Sow indoors and transplant out 8–12" apart. ~2,000 seeds/g. ③



A=0.1g, $1.50 **B**=0.3g, $3.50 **C**=1.2g, $9.00 **D**=6g, $18.00

"Placing a seed order is a gesture of both faith and hope! Thank you for being my main source of reliable seeds for so many years."
–Patricia Bee, Ovid, NY

4588LB Lemon Balm *Melissa officinalis* (70 days) *Melissa* is the Greek word for bee; the plant in flower attracts them. Perennial growing to 2'. Gather its yellow-green scalloped lemony leaves before plants flower. Delicious in salads, as a tea, with fruit, or dried for sachets. Flowers are edible. Essential oil of lemon balm smells fabulous and is highly effective against cold sores, but is very expensive. Steep multiple batches of leaves in olive oil to make an infused oil, one of the many ways to enjoy this relaxing calming comforting uplifting herb all winter. Likes very well-drained fertile soil; wet ground may winterkill it more than cold. However, tends to self-sow in the very same years that the roots winterkill. Zone 4. ~1,800 seeds/g. ②

A=0.3g, $1.10 **B**=3g, $2.80 **C**=15g, $6.00 **D**=45g, $12.00

4589MT Lemon Mint *Monarda citriodora* An annual member of the bee balm genus in the mint family. Native to Appalachia and related to Oswego Tea. The tiered pinkish-purple flower spikes of this showy 2–3' plant are long-lasting in fresh bouquets and can be dried for everlasting arrangements. Its lemon-scented leaves are delicious and commonly used to impart a coarse mint flavor with a hint of oregano to tea. Inhale the steam to relieve cold symptoms. Best in light moist soil. ~1,800 seeds/g. ②

A=1g, $1.00 **B**=7g, $2.50 **C**=28g, $6.00 **D**=84g, $12.00

4590LC Licorice *Glycyrrhiza glabra* Sweet and soothing root contains glycosides similar to the body's own natural steroids. Beneficial for revitalizing adrenal glands, good for colds and bronchitis, reduces throat irritation, yet an expectorant and anti-spasmodic. Adds sweetness, harmony and palatability to nearly every herbal combination. Give it lots of room so it can create the roots and runners you want. Weak competitor against weeds. Prefers sandy well-drained loam and a mulch to prevent heaving. Harvest 3–4 year-old roots in the fall. Perennial to Zone 4, grows 1½–4', bears white to violet flowers. ~90 seeds/g. ②

A=0.1g, $1.60 **B**=0.3g, $4.00 **C**=0.9g, $9.00
D=4.5g, $30.00

4592LV Lovage *Levisticum officinale* (90 days from transplanting) An underrated herb with many uses. Leaves have a strong celery taste and can flavor soups, stews and casseroles. Crush seeds and add to bread and pastries; candy stems and roots in sugar syrup. Said to restore the appetite and revive the love of life. Second-year plants are best for drying. Formerly used to mask the bitter herbs in medicinal concoctions. Umbelliferous perennial attracts beneficial insects, grows 3–6' and makes a dramatic architectural element in a decorative border. Likes moist rich deep well-drained soil. Zone 4. ~140 seeds/g. ②

A=0.5g, $1.10 **B**=4g, $2.80
C=16g, $6.00 **D**=48g, $12.00

4616SM Sweet Marjoram *Origanum majorana* (80-95 days) Grown as an annual in the North. 1' plant with grey-green rounded leaves of enchanting sweet fragrance. Cut often to prevent flowering. Use fresh or dried. Adds flavor to soups, stews and stuffings. Subject to damping off; do not overwater. Likes well-drained dry soil. ~4,000 seeds/g. ②③

A=1g, $1.20 **B**=7g, $3.00 **C**=28g, $8.00 **D**=84g, $21.00

4619MM Marshmallow *Althaea officinalis* Cousin to the hollyhock, used to soothe and soften irritated skin and membranes and to relieve stuck hacking coughs. It also mildly stimulates white blood cell production and relieves urinary tract infections and prostate problems. Harvest root of this 4–6' showy perennial in autumn of the third year. Meanwhile, enjoy the showiness of the flowers through the summer or eat the velvety leaves in salads. All mallows contain soothing mucilage in the root, and marshmallow has the most, so it makes a great home-garden substitute for slippery elm. For tea, steep roots in cold water for several hours rather than boiling. Plant in cool moist soil. Will self-sow. Zone 4. ~600 seeds/g. ①

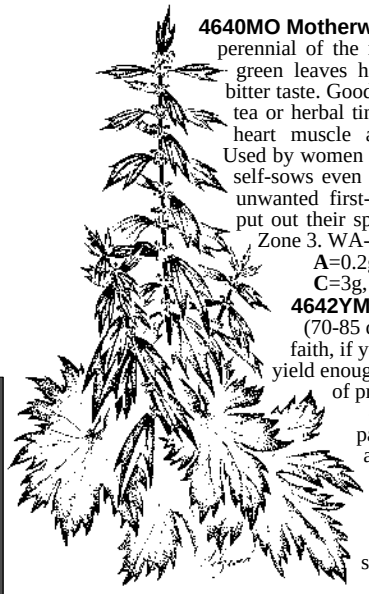
A=0.4g, $1.30 **B**=1.2g, $3.00 **C**=6g, $7.00 **D**=24g, $16.00

4630TO Milk Thistle OG *Silybum marianum* Named for the bold white splashes on its glossy leaves, said to be from Mary's milk. Fast-growing 3–5' annual with fiercely beautiful leaves, up to 8x24". Native to the Mediterranean. Use edible young leaves in spring salads or cooked like spinach; remove spines first! Flower stalk puts out large purple thistle flowers that were eaten like artichokes. Silymarin, found in the flowers and seeds, has been used to strengthen and regenerate liver tissue. Will self-sow; keep gloves handy to pull unwanted volunteers before they get big and prickly. May present a way to outwit raccoons. Chris Mazur of Apple River, IL, planted some around his sweet corn patch, and though the coons ravaged the rest of his garden, they did not molest his corn. Likes dry soil, very tolerant of drought. OT-certified. ~40 seeds/g. ②

A=1g, $1.00 **B**=4g, $2.50 **C**=28g, $6.00 **D**=112g, $16.00

4632CM Common Mint *Mentha spicata* (60 days from transplanting) Specific types of mint won't come true from seed. This is the common tea mint. Can be grown directly in pots indoors in winter. Keep it in containers to check its invasive tendencies. Likes moist soil, full sun or partial shade. Perennial to Zone 4. ~12,000 seeds/g. ③

A=0.2g, $1.40 **B**=1g, $2.80 **C**=4g, $7.00 **D**=16g, $24.00



4640MO Motherwort OG *Leonurus cardiaca* Hardy perennial of the mint family grows 2–4' with dull green leaves having a pungent odor and rather bitter taste. Good bee plant. Pick flowering tops for tea or herbal tincture. Believed to strengthen the heart muscle and relieve nervous tension. Used by women during life transitions. Readily self-sows even in relatively poor soil; pull up unwanted first-year basal rosettes before they put out their spiky flower stalk the second year. Zone 3. WA-certified. ~1,200 seeds/g. ①

A=0.2g, $1.60 **B**=1g, $3.80
C=3g, $10.00 **D**=9g, $25.00

4642YM Yellow (White) Mustard Seed (70-85 days) *Sinapis alba* Oh ye who have faith, if you plant a scant dozen, they should yield enough to make at least a couple batches of prepared mustard. This is the variety of seed most common to American palates but will be pallid without the addition of turmeric. Or alternately, toast the seeds in a fry pan until they pop, and then grind into spicy mixtures. As easy to grow as the leafy mustards. Harvest seeds as soon as pods begin to turn tan. Pods open once the seeds are dry. Spice up those cold winter nights! Annual. All seed is held over and germinates at 81%. ~145 seeds/g. ③

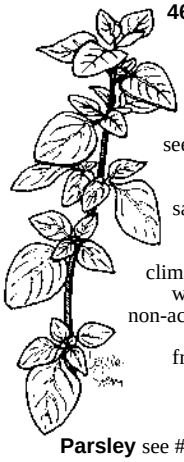
A=1.5g, $1.00 **B**=6g, $2.50 **C**=24g, $6.00 **D**=96g, $12.00

4643SN Stinging Nettle *Urtica dioica* Biodynamic gardeners use nettles to increase the potency of neighboring herbs, and to stimulate humus formation. An indicator of very fertile soil where it volunteers. Young shoots and leaves are delicious steamed as spring greens, very high in minerals. Also makes a great hair rinse or dry chicken feed. Perennial may spread rampantly by underground rhizomes if not controlled. Choose your spot carefully; the rhizomes as well as the leaves can sting. Cooking or drying removes the sting. Plant in damp rich soil with high nitrogen content; especially likes composted manure piles or the leaky side of your lushest compost bin. Chill the seed before sowing to improve germination, which takes 10–14 days. Grows 3–6'. Zone 2. 6,000 seeds/g. ③

A=0.2g, $1.40 **B**=0.6g, $3.00 **C**=2.4g, $7.00 **D**=7.2g, $14.00

OREGANO *Origanum* spp.

The oregano genus has more than 50 species. The ancient Greeks gave it its name, meaning 'joy of the mountains.' These fragrant flowering plants grow freely on steep rocky alkaline hills, filling the Mediterranean mountainsides with their joyful cheer and intense scent. Not only has oregano flavored foods for thousands of years, but it also has a variety of medicinal uses, from relieving rheumatism and asthma to decongesting stuffy head colds and even calming seasickness. Low-growing perennial with fragrant dull green and purple leaves and white flowers. Harvest when it is beginning to flower. Start indoors in spring for best results. Likes light well-drained soil. Will lose potency if soil is overfed. Zone 4. Survives some, but not all, winters in Zone 3.



4648GR Greek Oregano *O. heracleoticum* This is the true culinary herb for Greek and Italian cooking, and a close relative of marjoram. ~9,000 seeds/g. ②

A=0.2g, $1.30 **B**=1g, $3.20
C=5g, $6.00 **D**=20g, $20.00

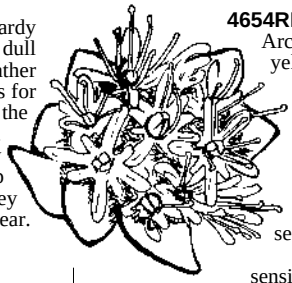
4649ZO Zaatar Oregano OG *O. syriacum* As you can see from the Latin, this is a Middle Eastern herb, an oregano that carries a bit of zing and a necessary ingredient in the condiment zaatar. Mix with sumac, toasted sesame seeds, salt and sometimes a few other herbs, to make the sprightly topping so essential to Arabic cuisine. Bushy tender perennial, hardy to Zone 10, grown as an annual in colder climes. For best, most aromatic flavor, harvest before its small white flowers appear. It thrives in sun on poor well-drained non-acidic ground. Start seeds indoors 6–8 weeks before frost or sow directly in the ground just prior to the last spring frost. AGRIOR-certified. ~4,650 seeds/g. ③ **NEW!**

A=0.02g, $1.90 **B**=0.08g, $4.40
C=0.24g, $9.00 **D**=0.96g, $30.00

Parsley see #**3158**-**3170**.

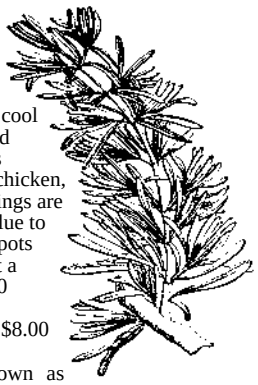
4651PR Pennyroyal *Mentha pulegium* Native to Europe, across the Mediterranean into Persia. Hardy aromatic ground cover is notorious for its insect-repellent properties: can be used to ward off mosquitoes and to repel fleas from pets. Makes a potent tea. Pennyroyal's distilled oil can be toxic, but the tea rinse is safe for external use. *Caution: Pregnant women should not use.* Plant 6" apart to make a dense mat. The plants creep with only the lavender flower stalks rising above the ground. Perennial in the mint genus likes rich well-drained soil with good moisture. Mulch for winter protection in Zones 4 and 5. Seed is held over. ~12,000 seeds/g. ③

A=0.2g, $1.40 **B**=0.6g, $3.20 **C**=1.8g, $6.50 **D**=5.4g, $15.00



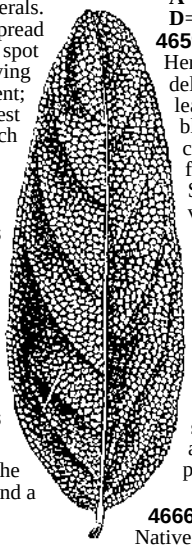
4654RR Rhodiola *R. rosea* Perennial, Zones 1-5. Also called Arctic Root or Rose Root. Succulent with small chartreuse-yellow flowers at the top of the stems in late April to early May. Circumpolar native grows in Russia, Siberia, Scandinavia and the Maritime provinces into Downeast Maine. Leaves can be eaten in salads, young shoots cooked and eaten like asparagus. North American Indians fermented the rose-scented roots before eating them. One of the best adaptogens, counters stress and fatigue, and strengthens the immune system. Stratify seed for six weeks, then gently press seed into flats. Grow on in the greenhouse; small plants grow slowly and are sensitive to conditions too wet or too dry. Transplant out 12" apart anytime the ground is workable. Best in sunny location in dry, rocky soil but fairly adapted to any well-drained soil. Keep weed pressure low until plants size up. Grows 1–3' tall. Roots harvestable after 3 years, though after 4–5 years will provide more mass. ~3,900 seeds/g. ② **NEW!**

A=0.01g, $2.20 **B**=0.03g, $5.50 **C**=0.12g, $15.00



4657RM Rosemary *Rosmarinus officinalis* From the Latin *ros marinus* meaning 'dew of the sea,' a reference to its native habitat, the Mediterranean coasts. Beloved tender perennial growing to 3–4'. Cannot withstand temperatures below 17˚, may be overwintered indoors if kept cool and moist. Try near a cool basement window and keep misted. Dark grey-green needle-like leaves impart a robust resiny flavor that complements chicken, pork and potatoes wonderfully. Rosemary clippings are said to repel slugs. Blossoms range from deep blue to pale pink or white. Likes dry alkaline soil; peat pots are too acidic to be a good starting medium. Not a good germinator—30% is average. Zone 8. ~800 seeds/g. ②③

A=0.2g, $1.60 **B**=0.6g, $3.80 **C**=1.8g, $8.00
D=7.2g, $20.00



4659RU Rue *Ruta graveolens* Also known as Herb-of-Grace. Very attractive perennial with blue-green foliage and delicate yellow flowers. Used as an insect and deer repellent. Its leaves, aromatic and bitter, contain iron and rutin for strengthening blood and vessels. Calms heart palpitations, nervous indigestion and colic. Used in eyewash to soothe tired eyes and relieve headaches from eyestrain. *Rue should never be ingested by pregnant women.* Several herbalists warn that large doses can cause pain and vomiting; also contact dermatitis in sensitive individuals. Ancients rubbed their arms in olive oil before harvesting to prevent irritation. Likes poor soil and needs good drainage. 18–24" tall. Zone 3. ~450 seeds/g. ②③

A=0.5g, $1.10 **B**=2g, $2.50 **C**=8g, $5.50 **D**=24g, $12.00

4664BS Broadleaf Sage *Salvia officinalis* Grows up to 3', with fuzzy grey-green oblong leaves and blue flowers. Used fresh or dried. Tasty in stuffing blends, with eggs, cheese, poultry, pork. CR and Eli use it to enhance black tea and coffee. Sage tea dries up mothers' milk and helps reduce hot flashes. Likes well-drained rich soil with good nitrogen content. Perennial plants grow woody with age; replace every 3 years or so. Zone 4, but only one of our five plants survived the harsh winter of 2003–4. ~125 seeds/g. ②③

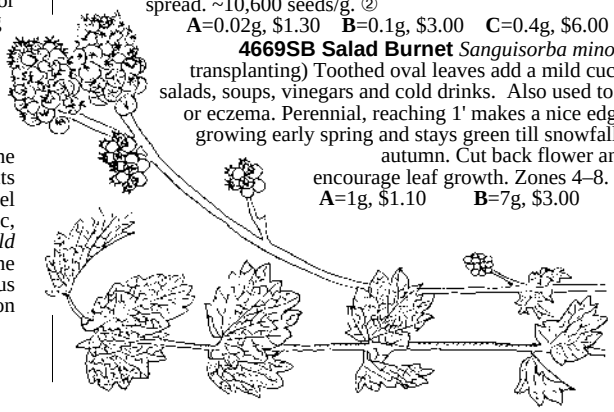
A=1g, $1.30 **B**=4g, $3.00 **C**=16g, $5.50 **D**=48g, $14.00

4666WS White Sage *S. apiana* An important ceremonial herb for Native Americans who use it for purification. Leaves can be smoked, taken as a tea, or used for smudge sticks and in sweat lodges. Bushy perennial with thick stems and dusty grey-green foliage. A good bee plant. Not nearly as hardy as common sage; needs heavy protection to overwinter in our climate. Zones 6-9. ~700 seeds/g. ②

A=0.05g, $1.90 **B**=0.2g, $5.00 **C**=1g, $8.00 **D**=5g, $25.00

4668SS Silver Sagebrush *Artemisia ludoviciana* The other white sage, easier to grow than #**4666** and perennial in Zones 4-8. Most often used ceremonially as a smudge for cleansing and purification. An attractive landscape plant, as well, growing to a height of 1–3' with ornamental silver foliage. Sow in spring when soil warms to 65˚. Space plants 1½' apart. Can spread. ~10,600 seeds/g. ②

A=0.02g, $1.30 **B**=0.1g, $3.00 **C**=0.4g, $6.00 **D**=2g, $18.00



4669SB Salad Burnet *Sanguisorba minor* (70 days from transplanting) Toothed oval leaves add a mild cucumber flavor to salads, soups, vinegars and cold drinks. Also used to soothe sunburn or eczema. Perennial, reaching 1' makes a nice edging plant, starts growing early spring and stays green till snowfall. Sow spring or autumn. Cut back flower and seed stalks to encourage leaf growth. Zones 4–8. ~175seeds/g. ②

A=1g, $1.10 **B**=7g, $3.00 **C**=28g, $6.00

4672SS Summer Savory *Satureja hortensis* (70 days) Annual grows to 1½' with narrow dark green leaves and lavender flowers. Cut often during growing season, before blossoms appear. Sow after last frost in well-drained soil next to beans, their complement in the kitchen as well. Use with dry or green beans, rice, stuffings, or in onion soup. Left to bloom, it is beautiful in fall with dark purple foliage and lavender flowers. ~1,700 seeds/g. ②③

A=1g, $1.00 **B**=14g, $3.00 **C**=56g, $5.50 **D**=224g, $16.00

4674WS Winter Savory *S. montana* (100 days from transplanting) Leaves shinier and thicker, stronger and more pungent than summer savory. Used to flavor dry beans or sauerkraut, winter soups and stews. Hardy bushy perennial grows 6–12", thriving in dry poor soil. Start indoors 8–10 weeks before last spring frost date; transplant after danger of frost. Makes an attractive border with its tiny green leaves and light lilac flowers. Also used as a tea to calm indigestion or as a gargle for sore throat. Zone 3. ~2,000 seeds/g. ③

A=0.1g, $1.20 **B**=0.4g, $2.80 **C**=2.4g, $5.50 **D**=9.6g, $12.00

4677SH Schisandra *S. chinensis* Perennial to Zone 4. Also called Magnolia Vine. Highly ornamental deciduous woody vine, to 25', with tiny pinkish-white flowers that produce clusters of aromatic red berries in late summer. Called *wu wei zi* in China, meaning 'five-flavor fruit,' they have a unique flavor—sweet, sour, bitter, salty and spicy. Can be eaten raw, cooked, dried, tinctured or made into wine. Traditionally used to treat asthmatic and other chronic coughs, insomnia and palpitations, schisandra is also adaptogenic, anti-inflammatory and immune enhancing. A wonderful choice for the permaculture garden. Dioecious; male and female plants are needed for fruit production. Stratify seed in sphagnum moss for 3–4 months before starting in early spring. Grows well on a trellis but will climb most anything. Prefers well-drained soil in full shade to dappled shade. Packet has around 10 seeds. ~45 seeds/g. ② **NEW!**

A=0.25g, $2.20 **B**=1g, $6.00 **C**=4g, $15.00

4680RS Red Shiso *Perilla frutescens* (85 days) Annual also known as Perilla. Introduced from Japan in the 1850s. Its extremely ornamental curly purplish-red cinnamon-scented sharp-flavored leaves are used in sushi, sweet and sour sauces, and stir-fries. Also known as *zi su*, a specific in Chinese medicine for seafood poisoning. Louise Weber of Greenwich, CT, asserts that deer won't touch it and plants it around their favorite crops. To break dormancy, freeze and thaw the seed several times over a 21–45 day period. Soak seeds several days or until they sprout. Move to indoor flats, then transplant into warm moist well-drained soil. Grows up to 4'. Absolutely intolerant of frost. ~500 seeds/g. ③

A=1g, $1.40 **B**=4g, $4.00 **C**=12g, $9.00 **D**=36g, $21.00

4681BS Baikal Skullcap *Scuttelaria baicalensis* Beautiful little perennial with a myriad of small violet monkshood-shaped blooms on a 1–2' subshrub. Looks like a shiny rosemary with slender ovate leaves. A definite candidate for the rock garden, it tolerates drought and grows best in light well-drained soil. Important as the Chinese herb *huang qin*, 3–4 year roots are dried and used as a bitter cooling sedative that lowers fever, blood pressure and cholesterol levels while stimulating the liver; also used to stop bleeding. To encourage the roots' optimal medicinal powers, pinch buds and don't let flowers bloom. Zone 3. ~250 seeds/g. ②

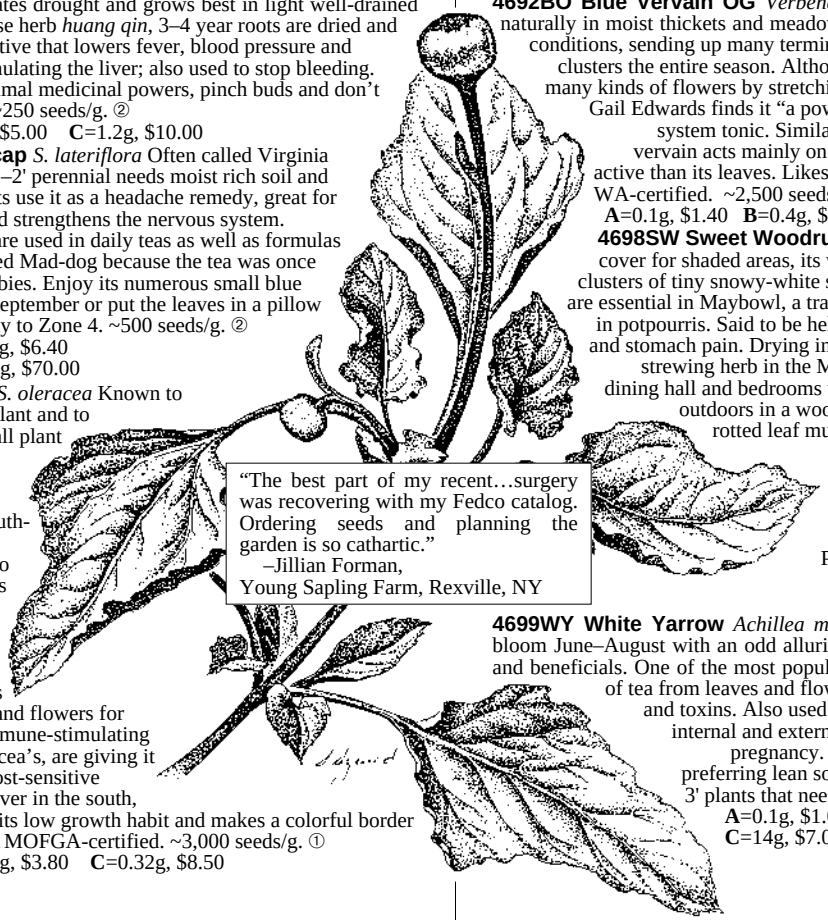
A=0.1g, $2.00 **B**=0.3g, $5.00 **C**=1.2g, $10.00

4682MS Mad-dog Skullcap *S. lateriflora* Often called Virginia Skullcap, native spreading 1–2' perennial needs moist rich soil and likes partial shade. Herbalists use it as a headache remedy, great for insomnia and both calms and strengthens the nervous system. Flowering tops of skullcap are used in daily teas as well as formulas for chronic conditions. Called Mad-dog because the tea was once used as a folk remedy for rabies. Enjoy its numerous small blue flowers from July through September or put the leaves in a pillow to induce restful sleep. Hardy to Zone 4. ~500 seeds/g. ②

A=0.05g, $1.90 **B**=0.2g, $6.40
C=0.8g, $25.00 **D**=2.4g, $70.00

4683SO Spilanthes OG *S. oleracea* Known to herbalists as the toothache plant and to some gardeners as the eyeball plant for its cute yellow globe flowers with rayless red-orange centers. Spilanthes' tingling and mouth-numbing properties appear rapidly and last a while. Also known as Salad Cress, it was introduced from Brazil to North America in the 1860s and listed as Para Cress in seed catalogs a century ago. Use its bronzy-purple leaves in salad or chew the leaves and flowers for temporary pain relief. Its immune-stimulating properties, similar to echinacea's, are giving it a wider audience. Highly frost-sensitive annual. Used as a ground cover in the south, it adds unusual beauty with its low growth habit and makes a colorful border planting in fertile moist soil. MOFGA-certified. ~3,000 seeds/g. ①

A=0.02g, $1.60 **B**=0.08g, $3.80 **C**=0.32g, $8.50



"The best part of my recent…surgery was recovering with my Fedco catalog. Ordering seeds and planning the garden is so cathartic."
–Jillian Forman,
Young Sapling Farm, Rexville, NY

4684ST Stevia *S. rebaudiana* (100-120 days) As sweet as it gets, stevia is several hundred times sweeter than sugar, but without the calories. It is used fresh, dried, powdered or in a liquid as a sugar substitute. An erratic and finicky germinator, the seed needs light. Likes heat so should not be transplanted outdoors until nights stay above 50˚. Work compost into well-drained soil or raised beds. Stevia grows into a bushy 2' plant with serrated leaves and white flowers in late summer. Pinch it back for greater bushiness and higher yields. Perennial in Zone 9, so treat as an annual or bring indoors in a container. Sweet as it is, it retards plaque and inhibits tooth decay. For more information about its culture and use see *Growing and Using Stevia* by Jeffrey Goettemoeller and Karen Lucke (**9690** in the Organic Growers Supply section). ~3,100 seeds/g. ②

A=0.01g, $2.10 **B**=0.04g, $5.60 **C**=0.2g, $24.00

4686TS Topas St Johnswort *Hypericum perforatum* Pretty yellow flower of fields and meadows turns tinctures and oils deep red. Used as tea, tincture or infused oil for many nerve disorders, from neuralgia and sciatica to insomnia, mild depression, seasonal affective disorder and chronic exhaustion. The infused oil is also cooling to sunburn and cuts, soothing to strained joints and muscles. Was even used in the Middle Ages for sword wounds! Frequent use can cause photosensitivity. Compared to generic St. Johnswort, Topas is an improved strain for commercial production, much earlier (blossomed first year from seed), more floriferous with a higher content of hypericin. Seedlings grow slowly. Prefers well-drained dry soil; very drought tolerant but essential oil levels increase with some moisture. 1–2' perennial hardy to Zone 3. *We cannot ship to North Dakota or California where it is considered a noxious weed.* ~7,000 seeds/g. ③

A=0.1g, $1.20 **B**=0.5g, $3.00 **C**=2g, $6.00 **D**=8g, $16.00

4687GT German Thyme *Thymus vulgaris* Creeping 10–12" mat-forming perennial brings depth of flavor to soups, gravies, casseroles. Said to calm the nerves, soothe headaches. As good in salad dressings as it is in sore-throat remedies. Bees love its short lavender flower spikes. Likes well-drained light dry alkaline soil. Its fine root system makes thyme difficult to move around the garden. Hardy Zones 4–9. ~4,000 seeds/g. ③

A=0.2g, $1.20 **B**=3g, $3.00 **C**=15g, $6.50 **D**=45g, $16.00

4689VL Valerian *Valeriana officinalis* Known as Nature's Tranquilizer or Herbal Valium, valerian root is used to reduce tension and anxiety, alleviate insomnia, and relieve muscle spasms and cramping. Harvest the roots in the fall of the second or later year. Early Greeks referred to valerian as *phu* (like our "phew") because of the distinctive fetid musky smell of the roots. Avoid high doses for prolonged periods. Tall leafy 3–5' perennial with clusters of honey-scented pale pink flowers. Remove flowers to hasten root development. Plant in moist fertile soil about 1' apart. Hardy to Zone 3. ~800 seeds/g. ③

A=0.2g, $1.30 **B**=0.6g, $2.80 **C**=2.4g, $6.00 **D**=7.2g, $14.00

4692BO Blue Vervain OG *Verbena hastata* This 5–6' perennial grows naturally in moist thickets and meadows and will do well in similar garden conditions, sending up many terminal spikes of bristly blue-violet flower clusters the entire season. Although scraggly, it blends very well with many kinds of flowers by stretching its spikes amongst them. Herbalist Gail Edwards finds it "a powerful spiritual presence" and nervous system tonic. Similar to *V. officinalis*, but more alterative, vervain acts mainly on the liver and lungs. Its roots are more active than its leaves. Likes light well-drained moist soil. Zone 3. WA-certified. ~2,500 seeds/g. ①

A=0.1g, $1.40 **B**=0.4g, $3.00 **C**=4g, $14.00 **D**=12g, $32.00

4698SW Sweet Woodruff *Galium odoratum* A lovely ground cover for shaded areas, its whorls of pointed leaves covered with clusters of tiny snowy-white spring flowers. Vanilla-scented leaves are essential in Maybowl, a traditional German punch, and also used in potpourris. Said to be helpful for migraine, nervous conditions and stomach pain. Drying increases its clover fragrance. A classic strewing herb in the Middle Ages used to purify the church, dining hall and bedrooms with its coumarin-rich fragrance. Sow outdoors in a woodland site or in a heavy layer of well-rotted leaf mulch. Can be very slow to germinate—up to 200 days—and then may not be visible right away because the plants grow by underground rhizomes. Be patient—woodruff will appear the following spring and grow 6–8" tall. Perennial, Zones 5–9. ~160 seeds/g. ③

A=0.2g, $1.50 **B**=0.6g, $3.20
C=2.4g, $7.00 **D**=7.2g, $15.00

4699WY White Yarrow *Achillea millefolium* Flat-topped white flowers bloom June–August with an odd alluring scent that attracts bees, butterflies and beneficials. One of the most popular herbs for colds and flu. A hot cup of tea from leaves and flowers induces a sweat to throw off heat and toxins. Also used to lower blood pressure and to stanch internal and external bleeding. Avoid large doses during pregnancy. Perennial grows 1–2', spreads slowly, preferring lean soil. Rich garden soil may produce lush 3' plants that need staking. Zone 2. ~5,000 seeds/g. ②

A=0.1g, $1.00 **B**=1g, $2.50
C=14g, $7.00 **D**=56g, $18.00

FLOWERS

Flowers are arranged here mostly by common name. For **Dye plants** see **p. 108**. **See chart on pp. 82–83 for cultural information and common uses. A botanical index appears on p. 109.** Days in parentheses after a variety indicate days to first bloom. What to plant next to what? A good old trick is to cut a flower and walk it around the garden, holding it close to other flowers to see which combinations are most compatible.

4802CQ Cerise Queen Achillea *A. millefolium* Perennial, Zones 3-10. Also known as Pink Yarrow. Easy to grow and tolerant of drought, heat and poor soil. Beautiful cherry-red flat flower heads 2–4" across on 18" stems with lacy foliage. A good border plant. Feeds many beneficial insects. Needs light to germinate. Start indoors and transplant out. ~6,200 seeds/g. ③
A=0.1g, $1.30 **B**=0.5g, $3.50 **C**=3g, $14.00

4804PL The Pearl Achillea *A. ptarmica* Perennial, Zones 3-10. Bears clusters of fully double small white pompon blooms with tiny yellow centers, almost like a large double Baby's Breath. Its common name Sneezewort would lead one to believe that the flowers induce excessive sneezing. Actually it is less allergenic than common yarrow. Easily cultivated, spreads readily and makes an effective "wild" border, 2–3' tall. Supplies copious cutflowers from spring until frost, enjoyable either fresh or dried. Dry slowly before the oldest blooms start to brown.
A=0.05g, $1.20 **B**=0.15g, $2.80
C=0.6g, $5.00

4807AC Acroclinium *Helipterum roseum* Annual. Also known as Sunrays. Daisy-like flowers may be harvested as cutflowers, but most frequently used in dried arrangements. Pick in bud stage; will open as it dries. White, rose and pink shades. Start in cool place 2 months prior to setting outdoors, or direct sow outdoors after frost. 2'. ~400 seeds/g. ③
A=0.2g, $1.00 **B**=0.6g, $2.50
C=2.4g, $5.00

AGERATUM *A. houstonianum*

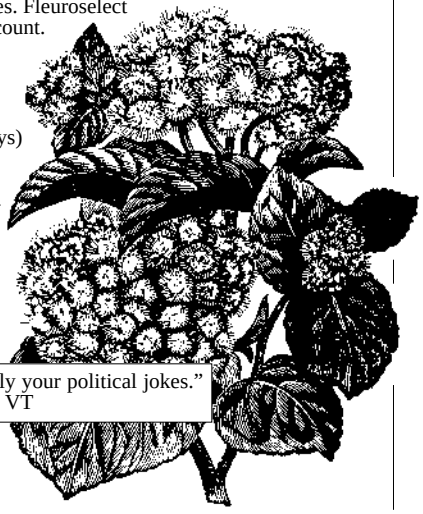
Annual. Its name means 'not growing old' as the flowers retain color for a long time. Also known as Flossflower. Covered with blossoms, great for summer borders. Start indoors in an 80˚ spot 6–8 weeks before last frost, grow on at 60–65˚. Set 9–12" apart. Likes full sun. Water in hot weather. Extreme temperatures inhibit flowering. Will not tolerate frost. Cut for vase when flowers are first opening. **~7,000 seeds/g.**

4811DB Dondo Blue (40 days from transplanting) A cutting ageratum with long stems. Blooms held nicely through a rainy summer, all the way from July 20 to Oct. 5 killing frost. ③
A=0.1g, $1.50 **B**=0.5g, $5.00 **C**=2g, $8.00

4813LD Leda Sparkling bicolor blossoms, light blue with white centers. Quilled petals lend a frosted effect. Very slow to brown even in seemingly interminable fall rains. ③
A=0.1g, $1.20 **B**=0.5g, $2.20 **C**=2g, $5.00

4817RS Red Sea These long-stemmed beauties make great cutflowers. We looked a long time for a "red" ageratum that holds its color in adversity. These looked clean even after a 3" rainfall. The color is magenta rather than true red. Attracts bees and butterflies. Fleuroselect winner. 25". Pelleted seed sold by count. ~160s/g. ⑤
A=20 seeds, $1.30
B=60 seeds, $3.00
C=180 seeds, $6.00

4819WB White Bouquet (90 days) A white ageratum that doesn't get "dirty" after a few rains. Blooms from early July through early October. In addition to steadfast color, White Bouquet boasts nice long stems, excellent for cutting. 24". ②
A=0.01g, $2.10
B=0.05g, $6.30

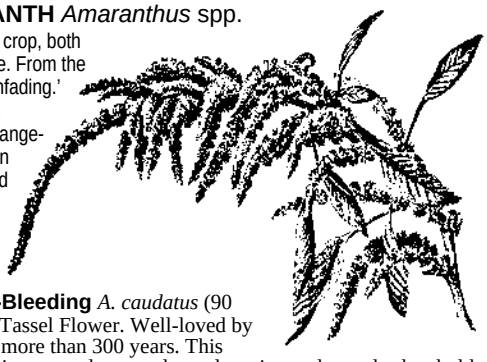


"I LOOVE you guys—especially your political jokes."
–Jo Schneiderman, Guilford, VT

4821CS Carpet of Snow Alyssum (60 days) *Lobularia maritima* Annual. Free-flowering ground cover, blossoming from late spring well into fall with a fragrance like fresh-mown hay. Cascading habit makes it excellent for windowboxes or terrace edges. 4" dwarf white. Formerly known as Little Gem, predates 1890. Widely recognized nectar source for beneficial insects. Start seed in cool place 2 months before setting out. Needs light to germinate. Transplant seedlings 4–8" apart. Easy to grow, likes sun, tolerates some shade. To extend their season, shear plants halfway back four weeks after bloom. Resistant to frost, will tolerate temperatures below 25˚. ~3,200 seeds/g. ②③
A=0.5g, $1.00 **B**=7g, $2.50 **C**=28g, $5.00 **D**=84g, $12.00

AMARANTH *Amaranthus* spp.

Annual. A dual-purpose crop, both nutritious and decorative. From the Greek *amarantos* for 'unfading.' Used as an ornamental, especially in harvest arrangements. Amaranth was an extremely important food of the Aztecs. **~1,250 seeds/g.**
Also see #**4300** for grain amaranth.



4831LL Love-Lies-Bleeding *A. caudatus* (90 days) Also known as Tassel Flower. Well-loved by cottage gardeners for more than 300 years. This vigorous 2–4' branching annual sports long drooping red tassels that hold until frost. Makes a good border; stake and tie for neater appearance. Goes well with bachelor's buttons, nicotiana or sunflowers. Start indoors at 70–75˚, grow on at 62–65˚. Avoid heavy fertilization. Space at least 1' apart for strong stems. May be air-dried by hanging upside down; use heat for better color. ~1,500 seeds/g. ③
A=1g, $1.00 **B**=7g, $2.00 **C**=28g, $6.00

4833CH Copperhead *A. cruentus* (46 days) Flaunts glorious copper-colored seedheads atop its majestic 5' stalks at maturity. Wonderful decorative complement to the red amaranths, used as a garden backdrop or to give harvest arrangements a bright earthy autumnal color. Also an underused food plant both for its seeds and its young leaves, but the seeds may require too long to mature in our climate. ②
A=0.2g, $1.50 **B**=0.6g, $2.80 **C**=1.8g, $7.00 **D**=9g, $24.00

4835HO Hopi Red Dye OG *A. cruentus* (46 days) A stately 6' plant, Hopi was the best of the nine amaranths we compared, displaying 1–2' deep burgundy inflorescences. Leaves may be green or burgundy or some variation. Eat the young leaves in salads or slightly steamed, admire them young or old. The Hopis make a scarlet food dye from the flower bract to color their ceremonial *piki* bread. Yanna Fishman of Union Mills, NC, suggests using Hopi in your floral arrangements. "When added to a flower bouquet it makes an ordinary clear jar look like an elegant purple-tinted vase as it colors the water." Stellar NOP, OT-certified. ①
A=1/16oz, $1.30 **B**=1/8oz, $2.40 **C**=1/2oz, $5.50 **D**=1oz, $9.00
E=4oz, $32.00

4837EO Elephant Head OG *A. gangeticus* In the aftermath of our latest manufactured budget crisis many people are wondering just exactly what goes on in our Congressional Elephants' heads. For a 110-year-old heirloom with a more pleasant and even amusing flair for the dramatic, tune out the politicians and elect this garden Elephant Head instead. The deep reddish-maroon bloom develops a 6–12" vertical "trunk" atop a 12–18" base during August. The whole spectacular plant grows 3–5'. Seed from German immigrants saved by three generations of gardeners in Idaho, popularized by Seeds of Change. Heldover seed germs at 85%. OT-certified. ①
A=0.1g, $1.30 **B**=0.3g, $2.60 **C**=1.2g, $6.00 **D**=6g, $20.00

4843AM Ammi Majus *A. m.* (105 days) Annual. Also known as White Dill, False Queen Anne's Lace, Lace Flower and Bishop's Flower. Grows 3–4'. This popular florists' filler looks like an elegant cousin to Queen Anne's Lace. I was enchanted by its attractive green buds and intoxicated by its aroma. Flat white lacy flower heads 5–6" across lend an airiness to bouquets. Best cut when all the florets are nearly open but before they shed pollen, Ammi will last 5–7 days in the vase. Prechill seeds two weeks. Cover seed lightly. Needs fluctuating temperatures, 80˚ days and 50˚ at night. Do not apply bottom heat. Germinates 7–14 days. Space 9–12" apart. *Caution: some people get contact dermatitis from the sap in the presence of sunlight.* ~1,900 seeds/g. ②③
A=0.5g, $1.00 **B**=2g, $2.50 **C**=20g, $5.00

4849NH New Hybrids Aster *Aster nova-belgii* Perennial, Zones 4-8. As the beautifully blooming summer plants succumb to senescence, the late-season doldrums hit the flower garden. But these hardy "New York" (the botanical name dates back to when the State of New York was known as 'New Belgium') perennial asters pick up right where the others leave off, blooming the first year in a range of colors from red to purple and bluish to white in sequence from August to November. Because this is a mix of various hybrids and each type, in turn, blooms for several weeks, it makes a continuous long-lived show of color on the 4' plants. ~1,700 seeds/g. ⑤
A=.05g, $1.30 **B**=0.2g, $2.80 **C**=1g, $6.20

CHINA ASTER *Callistephus chinensis*

Annual. Callistephus is from Greek *kallos* meaning 'beautiful' and *stephos*, 'crown.' The China Aster began its journey west around 1730 when a Jesuit missionary noticed it growing in a field near Beijing. Wildly popular by 1883 when Burpee listed 19 different classes of them compared to two each of marigold and zinnia. Good as bedding plants or cutflowers. Range of color includes blues, purples, pinks and white. Sow indoors at 70–72˚ in late winter, transplant after danger of frost. Cut stems when 2–4 flowers have opened. Vase life is 5–7 days, longer if you use a floral preservative. Aster Yellows is a serious disease problem. Use floating row covers to keep out leafhoppers, the vector. **~450 seeds/g.**

4851CR Crego Mix Bold ostrich-feather blooms hold well in wet or cold conditions. 2' plants with 4" flowers. Maule in 1915 asserted that they "surpass in size and beauty any other aster we have ever seen." "Pleasing, stately, handsome and vigorous," concluded H.W. Buckbee in 1927. ②③
A=0.5g, $1.00 **B**=4g, $2.50 **C**=16g, $5.00

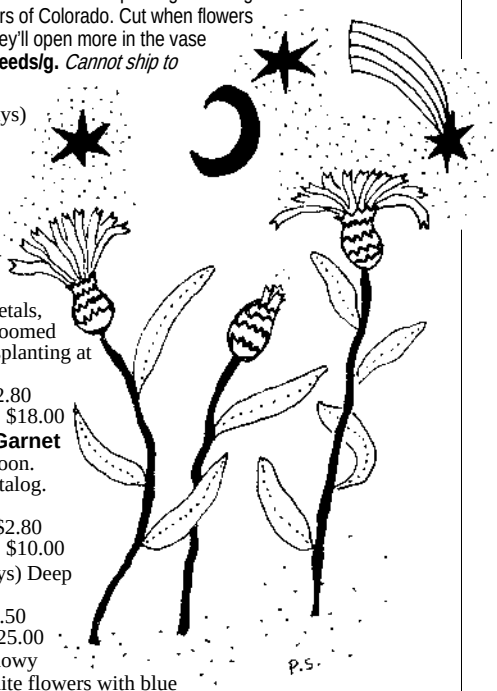
4854MM Matsumoto Mix (100 days) A very classy cutflower that may be harvested by the individual stem or in its entirety. Flowers sport distinct yellow centers amidst a variety of shades including apricot, blue, pink, red, rose, salmon and white. 2" semi-double blooms are concentrated at the top of strong 2½' stems. ⑤
A=0.2g, $1.90 **B**=3g, $8.00 **C**=9g, $20.00

4857PR Princess Mix (110 days) 2–3" flowers on long wiry stems. The pompon blooms are richly colored with deeply crested centers. Elegant cutflowers tend to be late bloomers. Unsurpassed in September. Heldover seed tested at 84%. ③
A=0.25g, $1.10 **B**=2g, $2.60 **C**=8g, $6.50

4861BB Single Alba Baby's Breath *Gypsophila paniculata* Perennial, Zones 4-8. Lovely as a border plant in masses, bearing many tiny single white flowers. Great filler for bouquets. Useful as an everlasting if cut before fully opened. May be sown direct; do not cover. Likes well-drained soil. Grows to 3'. ~1,270 seeds/g. ③
A=0.7g, $1.20 **B**=7g, $3.20 **C**=21g, $6.00

BACHELOR'S BUTTON *Centaurea cyanus*

Annual. Named for the centaurs of Greek mythology. Easy to grow, great for cutflowers and beds. Common name may refer to the tight unopened buds' resemblance to buttons or to their popularity as boutonnieres. Also known as Cornflower and, formerly, Hurt-Sickle because its wiry stems dulled many a sickle during mowing time. Start indoors at 60–65˚ 2 months before setting out or direct seed in May in a sunny location. Deadhead for persistent blooms, or make a succession planting in mid-late June if you desire late-summer flowering. Will self-sow. Lasts longer than most flowers after frost. Gained top rating for drought resistance from Garden Centers of Colorado. Cut when flowers are just beginning to open—they'll open more in the vase and last 6–10 days. 3'. **~210 seeds/g.** *Cannot ship to Alaska.*



4871BL Blue Boy (90 days) Showy blue. ②③
A=1g, $1.00
B=28g, $2.80
C=112g, $7.00
D=1lb, $20.00

4873FR Frosty Mix (96 days) Dark centers featuring maroons and purples fade into white outer petals, creating a frosted effect. Bloomed 4 weeks after a May 2 transplanting at Loon Song Farm. ③
A=1g, $1.10 **B**=7g, $2.80
C=28g, $7.00 **D**=112g, $18.00

4875BG Black Gem or **Garnet** (90 days) Ruffled dark maroon. Dates from Buist's 1942 catalog. Hard to find. ③
A=0.25g, $1.20 **B**=1g, $2.80
C=4g, $6.00 **D**=12g, $10.00

4877RB Red Boy (90 days) Deep red. Dates from 1942. ②
A=1g, $1.00 **B**=7g, $2.50
C=28g, $5.00 **D**=1lb, $25.00

4879BM Mix (90 days) Showy blend of blue, pink, red, white flowers with blue predominating. ②
A=1g, 90¢ **B**=28g, $2.50 **C**=112g, $5.50 **D**=1lb, $16.00

4881BF Florist Blue Balloon Flower *Platycodon grandiflorum* Perennial, Zones 3-8. Developed specifically for the cutflower trade, this 2½–3½' plant bears long-lasting deep blue rounded star-shaped flowers from June to August. Called Balloon Flower because the buds look like inflated balloons ready to burst. Slow to emerge in spring; needs some support once it does. Plant in sun to light shade, 12–18" apart. Taproot can make it tricky to transplant. Avoid wet soil where it will not thrive. ~1,100 seeds/g. ③
A=0.1g, $1.20 **B**=0.4g, $3.00 **C**=2g, $6.00

4883CB Double Camellia Mix Balsam *Impatiens balsamina* Annual. Balsam reigned supreme during the Victorian era when it was called Lady Slippers but has been neglected for almost a century. Vick's in 1895 averred "no plant will give more in return for the care bestowed upon it and none is more frequently neglected," recommending spacing at least 1' apart, aiming for a wide diameter at the base and a pyramid shape covered with flowers. A different school suggests pinching off the side branches and the first flowers to encourage a profusion of blooms near the top of the plant and give the effect of a ready-made bouquet. Both agree that wide spacing is important to make the most of Balsam's novel show of abundant pink, rose and white rosettes along the axils up its stems**.** Direct seed after danger of frost. Don't cover the seed. 2'. Held over seed germinates 80%. ~120 seeds/g. ③
A=1g, $1.00 **B**=7g, $2.50 **C**=28g, $5.50

4886BM Panorama Red Shades Bee Balm *Monarda didyma* Perennial, Zones 4-9. Crop failure; *not available in 2014.*

4889NB Nonstop Tuberous Begonia *B.* x *tuberhybrida* (140 days) F-1 hybrid. Perennial in Zone 10, grown as an annual. A boisterous mix of flamboyant color to awaken your garden! Nine shades, from pink to fiery red, apricot to golden orange, plus yellow and white, create a riot of color in a shady garden border or in hanging pots. Europe's #1 windowbox plant sports showy 3½–4½" fully double blooms on vigorous basal-branching stems. Begonias like shade, moisture, very rich soil, will tolerate a bit of sun. Start indoors, set out after all danger of frost. Needs 75° to germinate; takes 2–3 weeks. Pelleted seed. Packed by seed count, not weight. ②

A=10 seeds, $1.90 **B**=50 seeds, $6.00

4893BC Blue Clips Bellflower *Campanula carpatica* Perennial, Zones 4-10. Masses of light azure bellflowers dance 8" high above a tidy mound of foliage. Very hardy and easy to grow, Blue Clips will bloom in sun or partial shade from June to October. ~12,000 seeds/g. ②
A=0.05g, $2.80 **B**=0.2g, $10.00

4896BI Bells of Ireland *Moluccella laevis* (110 days) Annual, everlasting. Spikes of bright green bell-shaped "flowers" atop 2½' branching stems. Each green bell is really a showy inflated calyx with a tiny pinkish flower inside. When dried, bells turn creamy white. Needs light to germinate. Likes partial shade; thrives in cool climates. Will self sow. ~140 seeds/g. ②
A=1g, $1.00 **B**=3g, $2.50 **C**=15g, $5.00

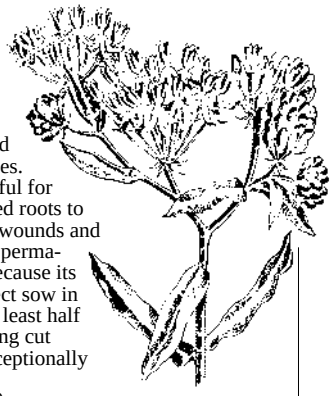
4899BS Blazing Stars *Liatris spicata* Perennial, Zones 3-9. Also known as Gayfeather. 18" spikes of rosy purple flowers for cutflowers, also excellent for drying. Start indoors in late winter in cool place and set out in spring in 6–8 weeks or direct seed in spring. Takes 3–4 weeks to germinate. Harvest the stems in the morning when at least half the flowers are open. ~330 seeds/g. ②

A=2g, $1.30 **B**=6g, $3.00
C=18g, $7.50

4901BB Bouncing Bet *Saponaria officinalis* Perennial, Zones 3-9. Also known as Soapwort. This charming sweetly scented pink perennial is often seen around old homesteads in Maine—a remnant from another time when its saponin-rich leaves and roots were used to clean delicate textiles, especially of grease. These days we appreciate soapwort more for the late-July colors of its dense clusters of 5-petaled flowers that attract pollinators with their faint clove scent. The 3' plant thrives in moist, partially shady areas but should not be planted next to ponds with amphibians or fish since saponins can be toxic. ~600 seeds/g. ③ **NEW!**
A=0.2g, $1.00 **B**=0.6g, $2.50 **C**=3g, $4.00 **D**=12g, $8.00

4903BU Green Gold Bupleurum *B. griffithii* (90 days) Annual. Though not well known outside of Dutch flower auctions where it commands a price similar to roses, this unique plant with yellowish flowers and round leaves gets attention from dried-flower growers. Its well-branched 2' stems air-dry perfectly, retaining their green color and looking like they had been dried in glycerine. Because each stem fans out, an individual stem provides backdrop for an entire arrangement, either fresh or dried. Start indoors early to reach full growth potential. Will self sow in warmer areas. ~320 seeds/g. ③
A=0.2g, $1.20 **B**=0.6g, $2.80 **C**=6g, $5.50 **D**=30g, $18.00

4906BW Butterfly Weed



Asclepias tuberosa Perennial, Zones 4-9. Also called Pleurisy Root. Native to North America and widely adapted, this bright sun-lover provides a bold splash of orange from June until frost. Vigorous mounded 2x2' plants bear broad 5" heads of waxy flowers attractive to butterflies. Both the flowers and pointed seedpods are useful for cutflower arrangements. Native Americans used roots to combat lung and throat troubles and to soothe wounds and sores. Germinates in 3 weeks at 70˚. Choose a permanent site with well-drained fertile sandy soil because its tuberous roots do not like to be disturbed. Direct sow in spring or fall, thinning to 18–24". Cut when at least half the flowers are open. Use caution when handling cut Butterfly Weed as sap can cause irritation. Exceptionally drought-tolerant. ~200 seeds/g. ③

A=0.5g, $1.20 **B**=2g, $3.20 **C**=6g, $6.00

CALENDULA *C. officinalis*

Annual. Old kitchen garden flower, 18–20" tall, also known as Pot Marigold. Beautiful orange and yellow semi-double flowers, good for informal bouquets, also edible. Blossoms can be snipped from their stems, dried and added to soups, salads and stews. They are also used in homeopathic remedies and herbal tinctures and ointments for their antiseptic and soothing qualities. Calendulas bloom over an extremely long period, thriving in cool weather and persisting through autumn's first frosts. Can be direct seeded in May or started indoors in cool place for early blooms. Readily self-sows. Don't crowd, give them full sun. Deadhead to keep blooms coming and the patch attractive or try succession plantings. **~150 seeds/g.**

4911FO Flashback OG (55 days) A mix of orange, apricot and peachy doubled petals, all with red backing to create a distinctive contrast. Colors fade to bicolor yellows or yellow-peach, adding interest as the plants mature. Blooms withstand light fall frosts; still look good in October. OT-certified. ①

A=1g, $1.70 **B**=4g, $3.60 **C**=12g, $8.00 **D**=48g, $24.00

4913KO Kablouna Mix OG (60 days) Distinct refined form features striking crested blooms of gold, orange, lemon and apricot with a dark contrasting center. One of the loveliest of the calendulas. "Kablouna," our seed room goddess who looks after the good fortune of seed packers, was named for this cultivar. OT-certified. ①

A=1g, $1.00 **B**=4g, $2.60 **C**=12g, $5.50 **D**=1oz, $10.00

4916MO Maya Orange OG A calendula with a different look. Its brick-orange petals are layered like shingles around the dark brown center giving the illusion of double blossoms, though they really are not. Good cuts to enliven summer bouquets. Donna Dyrek's began blooming on July 14 in 2009. Readily self-sows. AGRIOR-certified. ③

A=1g, $1.70 **B**=4g, $4.00 **C**=12g, $9.00 **D**=48g, $26.00

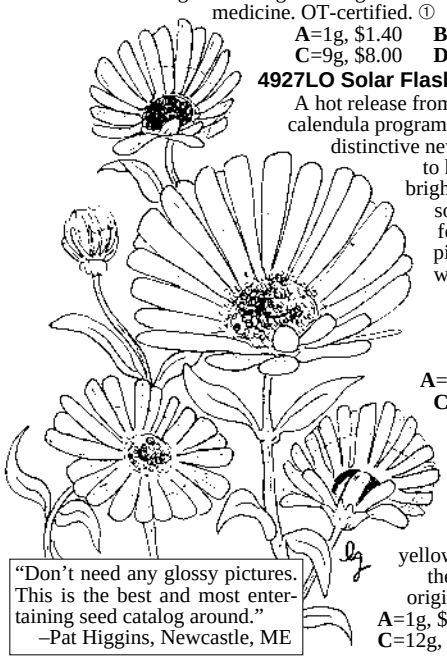
4920PB Pacific Beauty Mix The classic lovely yellow and orange mix. Herbalists highly regard its healing gifts. ②③

A=2g, $1.00 **B**=14g, $3.20 **C**=56g, $8.00 **D**=224g, $20.00

Red Heart (70 days) Dropped for slow sales; *no longer available*.

4925RO Resina OG (70 days) The best calendula for making tinctures and oils and the one Deb Soule grows at Avena Botanicals. Its medium-sized single blooms with small eye are extremely resinous, coating your fingers or clippers while you harvest flowers. The medicinal sticky resins impart a pleasant odor. Blossoms are primarily bright yellow with yellow centers. A few will be orange with light orange centers. Cheery flowers, good medicine. OT-certified. ①

A=1g, $1.40 **B**=3g, $3.60
C=9g, $8.00 **D**=27g, $18.00



"Don't need any glossy pictures. This is the best and most entertaining seed catalog around."
–Pat Higgins, Newcastle, ME

4927LO Solar Flashback Mix OG (55 days) A hot release from Frank Morton's amazing calendula program. Morton describes it as "a distinctive new family of flash, selected to highlight contrast between bright light yellows, pinks, and solid red or maroon." Some feature yellow petals, some pinkish-blond, some yellow with light tips, all with contrasting red backs. Take a vacation from calendula orange. ☙2007. OT-certified. ①

A=1g, $1.70 **B**=4g, $3.60
C=12g, $8.00
D=48g, $25.00

4929ZO Zeolights OG Pinky-maroon backing shows through the yellow petals to lend a pink tinge to the familiar calendula-yellow. Dark centers accentuate the color contrast. A Morton original. OT-certified. ①

A=1g, $1.60 **B**=4g, $3.60
C=12g, $8.00 **D**=48g, $25.00

4932CC Canary Creeper *Tropaeolum peregrinum* Annual. A climbing relative of the nasturtium. Profuse 8' vines with unique deeply lobed frog-toe-like foliage and clusters of lacy-petaled golden-yellow flowers from midsummer till frost. Gorgeous when grown on a sturdy tripod with #**5276** Kniola's Purple morning glories and/or #**318** Scarlet Runner beans. Grows in shade but prefers full sun. ~15 seeds/g. ③

A=1g, $1.20 **B**=7g, $4.20 **C**=28g, $10.50 **D**=112g, $32.00

4935FM Tall Candytuft Mix *Iberis umbellata* Annual. A sweet antidote to monotonous candytuft: a mixture of vibrant colors from pink to dark purple with a few whites included for contrast. Bushy mounded plant grows 18–24" and is covered with abundant small scented flowers. Excellent for borders. Direct seed in late spring. *Candia*, an old name for Crete, and *Iberis* show its Mediterranean origins. ~420 seeds/g. ②

A=0.5g, $1.00 **B**=5g, $2.50 **C**=25g, $5.00

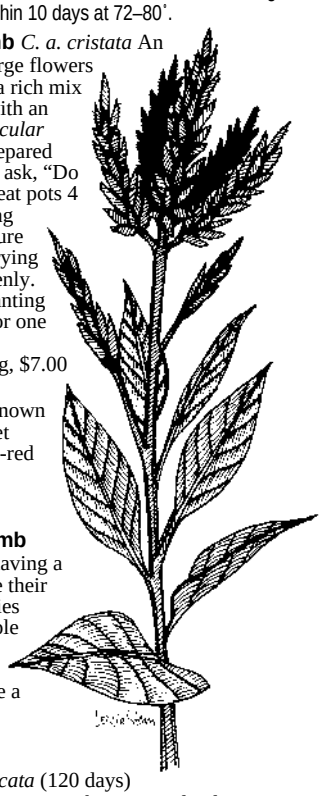
4937PC Persian Catmint *Nepeta mussinii* Perennial, Zones 4-8. While we can't duplicate the lavender fields of Provence, we can create a similar look by planting catmint. Its soft grey-green leaves clothe wiry 1' stems crowned with clusters of bluish-lavender tubular flowers. A member of the mint family, it grows rapidly in rich moist soils, but in sandy drier conditions can be contained. Plant early for blooms the first year. Thereafter will flower for 6 weeks from early spring to summer. Shear plants after blooming to encourage repeat blooms and to diminish self-sowing. Plant in full sun 2' apart. Heldover seed germinates at 86%. ~1,200 seeds/g. ③

A=0.1g, $1.10 **B**=0.3g, $2.80 **C**=1.2g, $5.50 **D**=6g, $12.00

CELOSIA *C. argentea*

Annual, good for fresh bouquets and everlasting arrangements. From the Greek *keleos*, 'blazing,' a reference to their brilliance. Commonly appear in three groups, *cristata* (crested, fancifully known as brains), *plumosa* (plumed) and *spicata* (with spikes or pointed). All share blazing colors, furry textures and unusual shapes. From the Southern Hemisphere, at their best in hot dry weather. Known as *ji quan hua* in China where both seeds and flowers are used for blood diseases, bleeding and urinary tract infections. Should germinate within 10 days at 72–80˚.

4943CG Coral Gardens Cockscomb *C. a. cristata* An extra-dwarf brain-type growing fairly large flowers on compact 10" plants. Blooms display a rich mix of red, crimson, rose, orange and gold with an almost neon glow. *Includes some spectacular giant brain off-types of all colors.* Be prepared when people approach your annuals and ask, "Do you have any brains?" Sow indoors in peat pots 4 weeks before last frost. Too-early seeding and cold temperatures can cause premature flowering. Seedlings sensitive to both drying out and damping off; apply moisture evenly. Pinch off heads two weeks after transplanting to induce branching or leave one stalk for one larger bloom. ~1,200 seeds/g. ③



A=0.5g, $1.20 **B**=3g, $2.80 **C**=15g, $7.00

4948FF Forest Fire Cockscomb *C. a. plumosa* Plume-type celosia also known as Feather Amaranth shows bright scarlet flowers, with strikingly beautiful bronze-red foliage. 30–36". ~1,500 seeds/g. ③

A=0.2g, $1.10 **B**=3g, $2.80
C=12g, $5.50

4951SL Smart Look Red Cockscomb *C. a. plumosa* Here is one place where having a glossy color catalog would help. Despite their diminutive 12" stature, these little beauties really stand out: their deep coppery-purple foliage contrasts charmingly with their neon-red plumes. So set aside your catalog, google this cockscomb, and take a good Smart Look! ~1200s/g. ②

A=0.05g, $1.40 **B**=0.2g, $4.20
C=1g, $15.00

4956CR Cramer's Amazon *C. a. spicata* (120 days) A truly wild thing from the Peruvian Amazon. Makes a great landscape plant, shooting a 3–6' spire punctuated by 2–3" reddish-purple spikes. Amazing long red stems and the spectacular spikes make this a perfect cutflower. Its coleus-colored leaves, green splashed with purple, heighten its dramatic effect. Blooms hold up better than other spicatas as a dried flower if cut while the spikes are still short. As the blossoms age they turn white on the bottom. Requires a long season. Start inside 8 weeks before frost and transplant into warm ground. Pinch at 12" to encourage branching. ~250 seeds/g. ②

A=0.2g, $2.10 **B**=1g, $6.00 **C**=4g, $16.00

4959ST Startrek *C. a. spicata scabra* "To boldly go where no seed has gone before." Each bloom is like a bouquet onto itself, quite unlike the single-spray wheat Celosia we formerly offered. The central plume surrounded by secondary blossoms creates the effect of a star-shaped cone. Bright-colored plumes in an intense shade of rose top these 40–48" plants. Fleuroselect Quality Award winner and companion to the Enterprise Series. "Beam me up, Scotty." ~1,050 seeds/g. ⑤

A=0.01g, $2.30 **B**=0.04g, $8.00 **C**=0.2g, $29.00

4962CE Kiwi Blue Cerinthe *C. major* var. *purpurescens* Annual. Also known as European Honeywort or Wax Plant. Vigorous bushy annual 12–30" really comes into focus when the cooler nights of late summer and early fall accentuate its colors. Coin-shaped grey-green foliage covers the sprawling stems. Profuse blue shrimp-like bracts bear terminal purple flowers shaped like comfrey blossoms. Tolerates heat, but likes cool weather and will withstand light fall frosts, looking best when others are fading. Good in a massed border. Direct seed or start indoors 6–8 weeks before setting out after danger of frost. Quick emerging and rugged. Rachel O'Meara of North Stratford, NH, observes, "Your notes say to start indoors, but I find it much better to direct seed—otherwise it is gone too soon." ~15 seeds/g. ⑤

A=0.6g, $1.60 **B**=2.4g, $5.00 **C**=7.2g, $12.00

4965CY Firmament Chinese Forget-Me-Not *Cynoglossom amabile* Annual. Also known as Hound's Tongue. No other flower can match the brightness of these tiny dainty 5-petaled azure-blue blossoms. Floriferous throughout the summer with three blooms per cluster and a half dozen clusters per plant. Try alongside calendula for color contrast. Introduced by Ernst Benary. 1939 AAS. Start indoors 6 weeks before the last frost or direct seed outdoors in spring. Germinates in 5–10 days at 65–70˚. Space plants 9" apart. Prefer full sun. 16–18". ~200 seeds/g. ③

A=1g, $1.00 **B**=7g, $2.20 **C**=28g, $5.00

4968CL Chinese Lantern *Physalis alkekengi* Perennial, Zones 3-10. Grown for its deep orange "lanterns," the calyxes that surround the red fruits and hold their color when dried. *Physalis* is Greek for bladder, referring to these husks. May be sown indoors in warm place. Likes full sun. Dig out every three years to prevent invasion. ~600 seeds/g. ③

A=1g, $1.30 **B**=3g, $3.00 **C**=9g, $8.00

CLEOME *C. hassleriana*

Annual. The old-fashioned Spider Flower sets large open flower clusters with very long stamens atop 4' stalks. Blooms throughout the summer and likes the hot and dry conditions of midsummer. For better germination, prechill seeds in refrigerator. Do not cover seed. Likes alternating day (80˚) and night (70˚) temperatures to germinate. **~450 seeds/g.**

4982RQ Rose Queen ③

A=0.5g, $1.20 **B**=7g, $3.50 **C**=28g, $10.00 **D**=112g, $38.00

4985VQ Violet Queen Gorgeous in August. ③

A=0.5g, $1.20 **B**=2g, $3.50 **C**=8g, $6.00 **D**=32g, $12.00

4988WQ White Queen ③

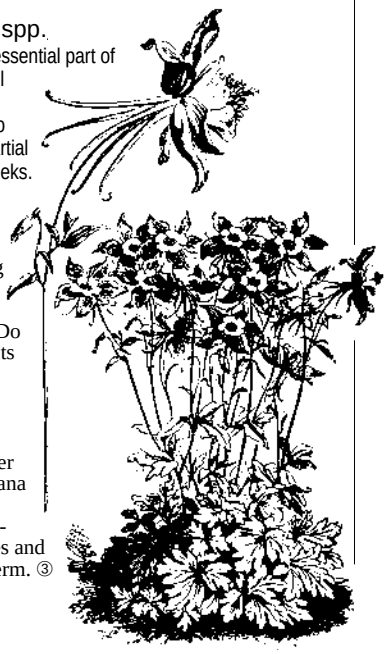
A=0.5g, $1.20 **B**=2g, $3.50 **C**=10g, $6.00 **D**=50g, $15.00

4992WI Wizard Coleus *Solenostemon scutellarioides*, formerly *Coleus blumei* (45 days) Perennial in Zone 10, grown as an annual. Leaves are a resplendent kaleidoscope of colors: rose and ivory edged in green, deep velvet burgundy centered with flame, bronzed pink, scarlet…12 in all. The colors are strongest in deep shade, lighter in part shade. Germinate at 65˚. Do not cover. Do not overwater; subject to damping off. Easy to grow and maintain. Just pinch off any late-season flower stalks. Grows 10–12", great in window boxes and planters. Nikos brings her favorites indoors before frost and enjoys their magic all winter long. ~3,500 seeds/g. ⑤

A=0.02g, $2.10 **B**=0.1g, $6.00

COLUMBINE *Aquilegia* spp.

Perennial, Zones 3-10. Columbines are an essential part of the cottage garden or border. Their delightful flowers in mixed colors bloom in spring and dance above attractive lobed leaves. Easy to grow, likes moist well-drained soil, sun or partial shade. Need light to germinate; take 3–4 weeks. **~800 seeds/g.**



4995SE Mrs. Scott Eliot Mixed *A. caerulea* Free-blooming white, red, lavender and pink spurred flowers rising to 30" on strong stems. Prechill seed 3–4 weeks. Will bloom first season if seeds are sown indoors in early spring. Do not cover. Flowers May and June, attracts hummingbirds. ③

A=1g, $1.50
B=3g, $3.40
C=9g, $7.50

4998EC European *A. vulgaris* A better landscape plant than Mrs. Eliot or McKana Giants because its leaves remain green through the whole season. Spurless blossoms are mostly pink, with a few purples and whites. 2½'. All seed held over; 83% germ. ③

A=0.3g, $1.10
B=1.2g, $2.80
C=6g, $5.00

5007YP Yellow Prairie Coneflower *Ratibida columnifera* Perennial, Zones 3-9. One of the joys of my job is getting to visit so many gardens. One recent summer, I was enticed into a field by a yellow fluttering of ballerina flowers dancing on erect 1–3' slender stems. As I approached, I could see that the yellow merely skirted around a protruding chocolate column. The common name Mexican Hat evokes a tall sombrero and the lively and colorful Mexican Hat Dance. Prairie grasslands native likes full sun, blooms May through August, undaunted by drought. ~1,830 seeds/g. ③

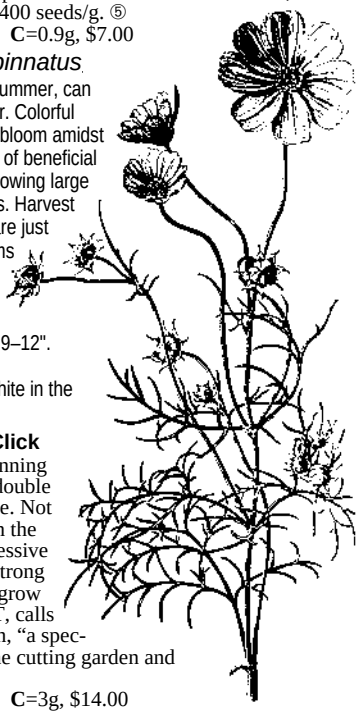
A=1g, 90¢ **B**=4g, $2.50 **C**=16g, $5.00

Coneflower Also see Echinacea, #**4545-4547**, Rudbeckia, #**5393-5399**.

5012ES Early Sunrise Coreopsis *C. grandiflora* Perennial, Zones 3-10. Won 1989 AAS for its ability to bloom weeks earlier than other Coreopsis. Dense well-branched 18" plants are loaded with 2" semi-double vivid golden-yellow blooms loved by syrphid flies, lady beetles, lacewings, parasitic wasps and many other beneficials. Start indoors 8–10 weeks before setting out in sunny spot, 12–18" apart. Do not cover seed. For cuts, harvest when flowers start to open. PVP. ~400 seeds/g. ⑤

A=0.1g, $1.50 **B**=0.3g, $3.30 **C**=0.9g, $7.00

COSMOS *C. bipinnatus*



Annual. Sun-loving, free-flowering all summer, can serve as an accent, screen or cutflower. Colorful daisy-style flowers with yellow centers bloom amidst lacy cut foliage. Attracts a broad range of beneficial insects. For best results, thin its fast-growing large plants. Deadhead for persistent blooms. Harvest cutflowers when petals on first flower are just opening. Don't wait too long! Old blooms don't last. Vase life is 4–6 days. Light aids germination. May be started indoors at 70–75˚ (grow on at 60–65˚) or direct seeded after last frost. Space 9–12". Tolerant of drought. **~140 seeds/g**.

See also #**6013** Sensation Purity White in the discontinued specials.

5021CR Cranberries Double Click My favorite color in this series, stunning dark maroon semi-double to fully double flowers have a lightly picoteed edge. Not the earliest to bloom but well worth the wait. Temporarily set back by excessive rains but makes a good recovery. Strong stems with attractive ferny foliage grow 2–3'. Truddi Greene of Chester, VT, calls it one of the new stars in her garden, "a spectacular deep red/pink…showy in the cutting garden and long-lasting in a vase." ⑤

A=0.2g, $1.90 **B**=0.6g, $3.60 **C**=3g, $14.00

5023RB Rose Bonbon Double Click Our latest addition from the fabulous Double Click family. Luxuriant fluffy semi-double to fully double rose-colored blooms. Absolutely spellbinding. ⑤ **NEW!**

A=0.2g, $1.90 **B**=0.6g, $3.60 **C**=3g, $14.00

5024DC Double Click Mix (100-120 days) These double and semi-double award-winning flowers are gaining lots of attention for their unique puffy blooms in shades of pink, plum and white. With sturdy stems, excellent for cutting, and prolific bloom until frost, this superior mix will make garden visitors do a double take. 4' tall. ⑤

A=0.2g, $1.70 **B**=0.6g, $3.50 **C**=3g, $12.00 **D**=12g, $39.00

5027PI Picotee (90 days) A unique bicolor cosmos. Flowers vary in hue from white to pink to rose, with each serrated petal edged in contrasting magenta. Plants grow 4' climaxed by blooms 2½–3" across. A beautiful addition to your cosmos bouquet. ③

A=0.5g, $1.00 **B**=3g, $2.50 **C**=15g, $6.00 **D**=1oz, $10.00

5028PW Psyche White Psyched for a pure-white cosmos with ruffled center petals plus thin rayed outer petals that create a fluted effect? Looked good even in wet humid 2013. Occasionally sets single flowers. Psyche White may be the same cultivar offered by Burpee as White Queen in 1923. Replaces Purity White. ③ **NEW!**

A=0.5g, $1.20 **B**=3g, $3.00 **C**=15g, $7.00 **D**=60g, $24.00

5029SS Sea Shells (100 days) If each petal on a Sensation were to curl into a tube, they'd have the striking delicate look of a Sea Shells. 3' plants come in the usual mix of pink, magenta and white shades. ③

A=0.5g, $1.10 **B**=3g, $3.00 **C**=12g, $6.00 **D**=1oz, $9.00

5035SM Sensation Mix (85-90 days) So named because its early maturity created a sensation when it first came out in 1930. Won AAS 6 years later. These large-flowered cosmos, in pinks, roses, magentas and occasional whites, need little tending. Withstand the first mild frosts of fall. 4–5'. Our fourth most-popular flower. ②

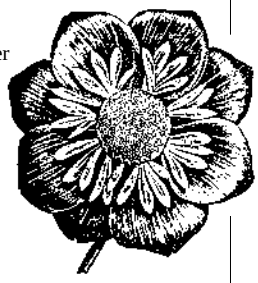
A=1.4g, $1.00 **B**=14g, $2.50 **C**=56g, $7.00 **D**=1lb, $31.00

5038BL Bright Lights Mix Cosmos *C. sulphureus* Annual. A bright mix of 1½–2½" semi-double gold and orange flowers on 3–4' plants. Unlike the cosmos above, flowers form in loose clusters on lobe-leaved plants that are highly sensitive to frost. Tolerates dry soils. ~140 seeds/g. ②

A=1g, $1.00 **B**=7g, $2.50 **C**=28g, $5.50 **D**=112g, $12.50

5041WD Wild Dagga *Leonotis leonurus* Tender perennial, Zones 8-11, grown as an annual. No cowardly lion here. Also known as Lion's Ear, spectacular and exuberant with a series of orange tubular flowers clustered in collars along the stem. Showy vining shrub can grow 6' in a summer if started indoors in February. Surface sow; slow germinator needs light. Damaged by frost in the mid-20s and needs full sun to flower. Native to S. Africa where it is used for epilepsy, headache, hypertension, and stomach and bronchial problems. The resinous 5" leaves, rough on top and velvety underneath, are said to have a euphoriant affect. In East African legend, Dagga imparts the qualities of a lion. Heldover seed tested at 87%. ~350 seeds/g. ③

A=0.05g, $1.50 **B**=0.15g, $3.00 **C**=0.6g, $9.00



5045HQ Harlequin Mix Dahlia *D.* x *hybrida* Tender perennial, Zones 8-10, grown as an annual. If you like to dally 'mongst the dahlias, these bicolored buffoons are sure to cheer you. Semi-double 2½" blooms sit atop strong stems. Maroon-white and scarlet-yellow bicolors predominated in the trials but the mix also includes shades of orange, rose and violet. Early flowering 12–14" plants. Heldover seed germinates at 81%. ~125 seeds/g. ⑤

A=0.2g, $2.20 **B**=0.8g, $6.20 **C**=4g, $20.00

Daisy see Shasta Daisy, #**5425**-**5428**.

DELPHINIUM x *cultorum*

Perennial, Zones 3-7. The Pacific Giants were developed in California in the '40s. Magnificent dense racemes make delphinium excellent in the border and as a cutflower. Old seed goes dormant and is very hard to reawaken so order fresh seed each year. Prechill seed for 2–4 weeks, then germinate at 65–75˚ and grow on at 50–60˚. Likes sun, moist rich soil, can tolerate some shade. Heavy feeder; sidedress in spring with well-composted manure. Harvest when one fourth of the flowers are open. **~450 seeds/g**.

5052AD Astolat Pacific Giant Pastel mix in lilac, raspberry and rose with dark bees. 6'. ③

A=0.2g, $1.40 **B**=0.6g, $3.30 **C**=1.8g, $7.50

5054KN Black Knight Pacific Giant Intense dark purple with black bees. Stately and breathtaking. 6'. ③

A=0.2g, $1.40 **B**=0.6g, $3.30 **C**=1.8g, $7.50

5057SS Summer Skies Pacific Giant Light azure, white bees. 6'. ③

A=0.2g, $1.40 **B**=0.6g, $3.30 **C**=1.8g, $7.50

5059CY Connecticut Yankee Mix Dwarfed version grows only 3'; good where wind is a problem. 1965 AAS in blue, purple, lavender and white. ③

A=0.25g, $1.50 **B**=1g, $5.20 **C**=3g, $12.50

DIANTHUS spp.

The name comes from the Greek meaning 'divine flowers.' Some are carnations; some are commonly known as Pinks, not for their color, but for their serrated petal tips which look like they've been cut with pinking shears.

5061SW Double Choice Mix Sweet William *D. barbatus* Biennial, Zones 4-10. A fragrant self-sowing biennial with familiar flat-topped flower clusters in red, pink, white, lavender or mixed colors. Germinates in 7–14 days at 70˚. May be started 2 months before setting outdoors, or direct seeded in late summer or fall. Requires full sun and good drainage; likes lime. 18". ~930 seeds/g. ②

A=0.5g, 90¢ **B**=7g, $2.20 **C**=28g, $5.50

5063RG Reisen Giant Superb Mix *D. caryophyllus* Perennial in Zones 8-10, grown as an annual. 20" plants produce fully double fringed carnations in an array of colors (red, violet, rose, white and bicolor) with corresponding differences in fragrance. The perfumed clove scent of the red is the most tantalizing, reminiscent of the exquisitely scented flowers that one reads about in old horticultural lore. ~500 seeds/g. ③

A=0.2g, $1.10 **B**=1g, $2.50 **C**=3g, $5.00

5065RL Rainbow Loveliness Mix *D.* x *hybrida* Annual. As Stéphane Mallarmé put it, "Without charm there can be no fine literature, as there can be no perfect flower without fragrance." Rainbow Loveliness has the fragrance—glorious, heavenly, sinfully delicious, intoxicating, jasminy— and the good looks. "Swallowtails loved them," observed Jillian Forman of Young Sapling Farm, Rexville, NY. The lilac white, which we grew, sports deeply fringed white blooms with hints of pink at the tip and a greenish center eye, creating a wispy feathery effect. This mix of border pinks also includes strains of carmine, pink and bicolored 1½" blooms in loose clusters. Blooms late July from early June transplanting. 14". Heldover seed tested at 78%. ~1,200 seeds/g. ⑤

A=0.02g, $2.00 **B**=0.1g, $6.00

5067DI Lacy Blue Didiscus *Trachymene coerulea* (95 days) Annual. Also known as Blue Lace Flower, introduced from Australia in 1828. Looks like a light blue version of Queen Anne's Lace. Airy flower heads on 2' stems floating like a blue mist above attractive finely cut foliage are excellent for cutting. Start indoors or direct seed after danger of frost. Transplant 8" apart. Likes full sun. ~360 seeds/g. ③

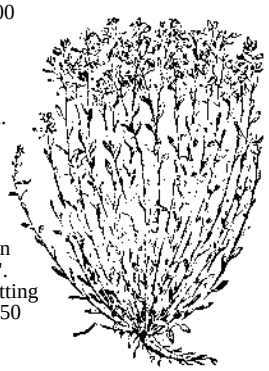
A=0.25g, $1.20 **B**=1g, $2.80 **C**=3g, $5.50 **D**=15g, $14.00

5075KJ Kilimanjaro Euphorbia *E. marginata* Annual. Also known as Snow-on-the-Mountain. If global warming continues, we'll have to give this a new name. A foliage plant grown for its ovoid green leaves that quickly become outlined in striking white. Interplant with bright flowers for good contrast. Well adapted to poor or average soils; grew about 2' in my dry raised beds but capable of reaching a foot taller. Janine Welsby said it repelled rodents from her sweet potatoes. Long-lasting in a vase where it provides valuable filler with good color base. Will self-sow. Start indoors at 60–68˚, grow on at 60˚. Can be an erratic germinator, taking 10–14 days, sometimes much longer. Transplant out after danger of frost. *Caution: the milky sap may cause itching or rash for sensitive individuals. Do not rub your eyes after handling Euphorbia.* ~50 seeds/g. ⑤

A=0.3g, $1.10 **B**=0.9g, $2.50 **C**=4.5g, $7.00

FLAX *Linum* spp.

Linum is Latin for 'linen,' but the variety we list is ornamental.



Scarlet Flax *L. grandiflorum* 'Rubrum' Annual. Dropped for slow sales; *no longer available.*

5079BF Blue Flax *L. perenne* subsp. *lewisii* Perennial, Zones 4-9. Also known as Prairie Flax. Single light-blue flowers and finely cut foliage for borders or rock gardens. New flowers open every morning all summer, fade in afternoon heat. Likes full sun. Very drought tolerant. 9–12". Start indoors in a cool place 6–8 weeks before setting out or direct seed in cool soil in spring or fall. ~750 seeds/g. ②

A=1g, 90¢ **B**=7g, $2.20 **C**=28g, $5.00

FLOWERING CABBAGE & KALE

Brassica oleracea

Biennials grown as annuals. Sometimes used for garnishes or in salad mixes. Well adapted to cold climates, they are at their best when most flowers have given in to fall frosts. **~350 seeds/g**.

5082FC Flowering Cabbage Mix Good ornamental for our climate. The colors—green outer leaves and pink, white or purple centers—deepen at the onset of chilly autumnal nights. Start indoors 5–7 weeks before setting out in midsummer for fall maturity. While weather is still hot, sidedress with manure so that the plants will make rapid growth before nights begin cooling. As autumn approaches, withhold nitrogen to speed coloring. 10". ③

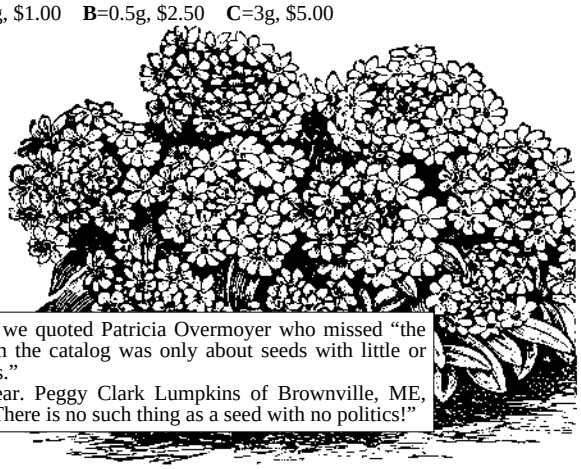
A=0.25g, $1.20 **B**=1g, $2.80 **C**=4g, $5.00

5084RC Red Chidori F-1 hybrid. Flowering kale is called *Ha-Botan* in Japan, meaning 'leafy peony.' The Japanese are world leaders in hybridizing these ornamentals, and in Red Chidori they have brought their work to its ultimate expression. Chidori had the brightest purple outer leaves and the sharpest red centers of any we tried. These colors reach their zenith shortly after frost when other garden hues are fading. Red Chidori leaves have finely ruffled edges that further accent their beauty. Allow enough space to grow 8–12" high and 12–14" across. ⑤

A=0.2g, $2.20 **B**=1g, $6.50

5091FN Forget-Me-Not *Myosotis sylvatica* Perennial, Zones 3-9. The older I get, the more I want to be surrounded by plants that care for themselves. This little charmer, a biennial or short-lived perennial that self-seeds for many years, fits the bill. Excellent grown in a mixed border, where they peek out atop 6" stems with clusters of sky-blue color. They tolerate a wide range of conditions and grow in both sun and shade. Now if only I can *remember* not to weed them out the following spring. ~1600 seeds/g. ②

A=0.1g, $1.00 **B**=0.5g, $2.50 **C**=3g, $5.00



Last year we quoted Patricia Overmoyer who missed "the days when the catalog was only about seeds with little or no politics."

This year. Peggy Clark Lumpkins of Brownville, ME, replies, "There is no such thing as a seed with no politics!"

5095FC Tall Mix Four O'Clock *Mirabilis jalapa* Annual. Also known as Marvel of Peru. The plant is anything but timid. Breck's in 1885 called it "a very desirable plant where there is plenty of room," and suggests each specimen should stand singly 3' apart. The fragrant trumpet-shaped flowers, in bright shades of cerise, burgundy, pink, yellow and white, open in late afternoon, reaching peak glowing loveliness at dusk. The 2–3' plants make good background or annual hedge. Start indoors, transplant out when warm weather has settled in. Likes full sun. Will self-sow in warmer areas. Drought-tolerant. ~17 seeds/g. ②③

A=3g, 90¢ **B**=9g, $2.20 **C**=27g, $5.00 **D**=135g, $12.00

GAILLARDIA spp.

Also known as Blanketflower. Low-maintenance prairie native likes light dry well-drained soil and full sun.

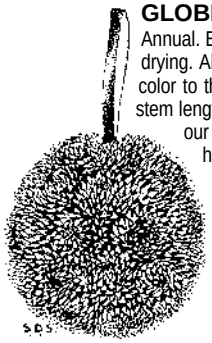
5097BG Burgundy *G. aristata* Perennial, Zones 4-10. When I first laid eyes on this in a nursery, it stood out from the pack. Burgundy has all the toughness of a prairie native enhanced with the solid deep wine color of a sophisticated garden-tour specimen. 3–4" daisy-like flowers bloom all summer on 2–3' plants. A favorite of butterflies and of gardeners who like to bring cutflowers inside. Plant 18–24" apart. ~280 seeds/g. ③

A=0.25g, $1.10 **B**=1g, $2.80 **C**=4g, $6.50

5099SG Sundance Bicolor *G. pulchella* Annual. These striking bicolor red and yellow blooms bring mahogany magic to your flower beds. The 12–15" plants spread a luxurious 16" and are covered with generous globe-shaped flowers. Sunloving plant has broad adaptation, very tolerant of heat and drought. Spread habit is ideal for hanging baskets and containers. Awarded both a Fleuroselect Gold Medal and a 2003 AAS citation. Sow indoors in spring and transplant out at 15" spacing. Likes alternating day (70-75˚) and night (60-65˚) temperatures to germinate. ~600 seeds/g. ③

A=0.25g, $1.60 **B**=1g, $3.60 **C**=4g, $10.00

GLOBE AMARANTH *Gomphrena globosa*



Annual. Beautiful round clover-like 1" flowers on 2' stems perfect for drying. Also enjoyable as bedding plant. We've switched all but one color to the Las Vegas series (more compact plants with the same stem length) which was 15 days earlier and much more floriferous in our trials. Bloomed for Donna Dyrek on July 15. No gamble here—these are sure to sizzle!

Easily grown in any soil, likes hot sun, blooms prolifically. Tolerates dry weather and some frost. Chill seed 4–6 weeks at 40˚, then start indoors at 60–70˚ for best germination. Germination is erratic; can take from 7–30 days. Grow on at 55–60˚. Do not overwater. Transplant in 8–12 weeks, spacing at 12–18". **~200 seeds/g.**

5102PG Las Vegas Purple ②

A=0.1g, $1.60 **B**=0.4g, $5.00 **C**=1.2g, $12.00

5104QG QIS Red Vibrant strawberry-red profuse blooms. QIS stands for Quality In Seed. Enormously popular with commercial growers. ③

A=0.1g, $1.20 **B**=0.4g, $2.50 **C**=1.2g, $7.00

5107WG Las Vegas White ②

A=0.1g, $1.60 **B**=0.4g, $5.00 **C**=1.2g, $12.00

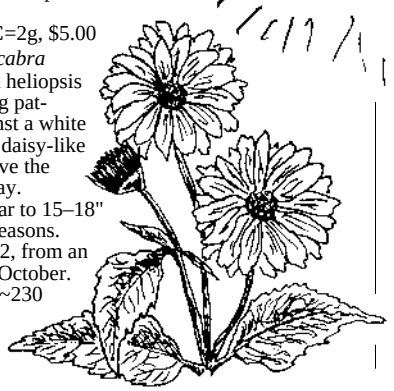
5109MG Las Vegas Mix Three vibrant colors: pink, purple and white. ②

A=0.1g, $1.60 **B**=0.4g, $5.00 **C**=1.2g, $12.00

5111HT Hare's Tail *Lagurus ovatus* Perennial grass, Zones 10-11, usually grown as an annual. Soft fuzzy grey-green to white dense conical flower heads feel soft as a bunny and are accentuated by very fine long purple hairs (plumose awn points) that protrude decoratively from the fur. Easy to air-dry; makes a great addition to everlasting arrangements. Pick heads (or tails?) for drying before fully mature. 1–2' plant. ~2,000 seeds/g. ③

A=0.1g, $1.10 **B**=0.5g, $2.80 **C**=2g, $5.00

5113SS Sunburst Heliopsis *H. scabra* Perennial, Zones 4-9. A most unusual heliopsis that sports variegated foliage featuring patterned bright green veins etched against a white background. Masses of bright yellow daisy-like flowers with darker centers stand above the foliage to complete its arresting display. Bushy plant grows slowly the first year to 15–18" but continues up to 4' in subsequent seasons. Donna's first bloom was July 12, 2012, from an April 8 start. It was still flowering in October. All heldover seed; 78% germination. ~230 seeds/g. ⑤



A=0.1g, $2.50 **B**=0.4g, $8.00 **C**=1.2g, $22.00

5116MH Marine Heliotrope *Heliotropium arborescens* (120 days) Tender perennial, Zone 9-10, grown as an annual. Native to Peru, an old-fashioned scented flower with a rich history. The aroma fills the garden on a cool damp day. Victorians edged their rose beds with heliotrope and it is still cultivated in Europe for perfumery. Smells like sweet violet, but deeper, and has been described as similar to vanilla, almond, or cherry pie. Works well in hanging baskets, containers, the front of borders or any location where the scent will readily reach you. It may be transplanted indoors for the winter. 14–18" plants with deeply etched viburnum-like dark green leaves bear big flat clusters of tiny star-shaped royal blue flowers. Somewhat slow, erratic germinator, takes at least 2–3 weeks. ~1,500 seeds/g. ③

A=0.1g, $1.30 **B**=0.6g, $4.00 **C**=3g, $10.00

HOLLYHOCK *Alcea rosea*

Biennial, Zones 3-8, often reseeds. An old-time favorite for background color. Needs staking. Cut flower stalk to induce rebloom. Likes full sun, lots of room, and moist soil. Seed may require alternate freezing and thawing to break dormancy. Start indoors in a 70˚ spot 2 months prior to transplanting. ~105 seeds/g.

5122CD Chater's Double Mix Double flowered in shades of red, pink, yellow and white. Dates back to the 1880s. 4–5'. ③

A=1g, $1.30 **B**=5g, $3.20 **C**=15g, $8.00

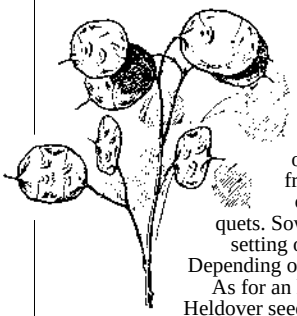
5124SM Indian Spring Single Mix Old-fashioned single 7' beauty in shades of red, yellow, white and rose. Favored by hummingbirds. 1939 AAS. ③

A=0.25g, $1.00 **B**=1g, $2.50 **C**=3g, $5.00

5127BH Black Hollyhock *A. r.* var. *nigra* Heirloom with shimmering burgundy-black single flowers. Lasts 3–4 years in favorable conditions. Surface sow inside in April. Overly rich potting mixes will encourage damping off. May be the same black hollyhock grown by Thomas Jefferson at Monticello. ③

A=0.25g, $1.20 **B**=1g, $2.50 **C**=4g, $6.00

5132HY Honesty *Lunaria annua* Biennial, often grown as an annual, for everlasting arrangements. Also known as Silver Dollar, Moneyplant and Moonwort. Could be the solution to our national economic woes if only its silver seed pods were legal tender. Or if our public figures lived up to Honesty's name and in place of their usual phony rhetoric, advanced real solutions to put our citizens back to work at good jobs. In our catalog Honesty is a winter-hardy biennial with fragrant lavender flowers usually grown for its large coin-shaped seed pods that shimmer in winter bouquets. Sow indoors at 65–70˚, grow on at 60˚ at night before setting out to a sunny location, or direct sow spring or fall. Depending on conditions, may not flower until second year. 3'. As for an honest politician? Try VT Senator Bernie Sanders! Heldover seed germinates 90%, no lie! ~50 seeds/g. ③



A=1g, $1.00 **B**=14g, $3.00 **C**=42g, $6.00

Immortelle Mix *Xeranthemum annuum* Annual, for everlasting arrangements. Slow sales proved it to be not immortal. *No longer available.*

Impatiens *I. wallerana*

Perennial in Zone 10, grown as an annual. Impatiens is named for the way its seeds pop explosively out of their ripe pods. Freely branching 8–10" plants. Thrives in shade and requires little care. Start indoors, need light so surface-sow, 70-80˚, takes 14 days to germinate, provide even moisture, do not overfeed, set out after danger of frost. Pinch blooms before they go to seed for best display. ~1,600 seeds/g.

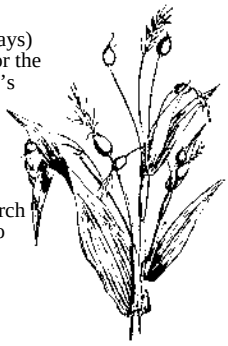
Super Elfin Pastel Mix *I. w.* Replaced by #**5142** Super Elfin Paradise Mix. *No longer available.*

5142PM Paradise Mix *I. w.* F-1 hybrid. Bring a bit of tropical color into your garden with this new mix in the Super Elfin series. Lavender, fuchsia, violet and cantaloupe-colored flowers. Replaces Super Elfin Pastel Mix. ⑤ **NEW!**

A=0.03g, $2.20 **B**=0.15g, $8.00

5144JL Blue Pearl Jacob's Ladder *Polemonium caeruleum* (90 days) Perennial, Zones 3-8. A staple of the shade garden in cooler climes. Where so few plants flower, Blue Pearl shines! Sky blue 1–1 1/2" cup-shaped blooms with distinctive gold stamens flower from late spring to early summer except in extreme heat. The long-lived compact 1' plants perform best in partially shaded borders, at the edge of woodlands or at the base of small shrubs or roses. Space 1' apart. Called Jacob's Ladder for the arrangement of parallel leaflets along the stem. Makes a beautiful cutflower. ~850 seeds/g. ③

A=0.1g, $1.20 **B**=0.5g, $3.00 **C**=2g, $5.50



5147JO Job's Tears OG *Coix lacryma-jobi* (100 days) Perennial in Zone 9-10, grown as an annual. Named for the Greek *coix* which means 'palm,' this ornamental grass's foliage resembles corn with blades up to 1½" wide. Spiky 2–3' stalks good for planters or as filler in dried fall arrangements. Sets pendulous sprays of globular pearly purple-grey seeds, the tears, which may be strung as beads for necklaces. A great favorite of kids who love to harvest the seeds. Start indoors in late March or early April. Forgiving and easy to grow. Believed to be one of the oldest grasses in cultivation, featured in seed catalogs for almost two centuries. Our thanks to Alicia McDonald of Whately, MA, who sent us seed. MOFGA-certified. ~5 seeds/g. ①

A=2g, $1.20 **B**=6g, $3.00 **C**=24g, $9.00

5150QM Joe Pye Weed ECO *Eupatorium purpureum* Perennial, Zones 4-9. Also known as Queen of the Meadow or Gravel Root. A "queenly" native: stately, tall and beautiful, with dense florets of dusty pinkish-purple flowers and foliage that releases the scent of vanilla when crushed. At 5–9' tall, makes an impressive background plant and a good cutflower. Medicinally, the root is used to treat chronic irritable bladder, urinary infections, kidney stones, menstrual cramps and prostate infections. Also stimulates circulation and reduces inflammation. Does best in moist well-drained areas, full sun or part shade. Surface sow in spring or fall; needs stratification unless sown in fall; takes 3 weeks to germinate; direct seed or transplant. All seed held over; germinates at 93%. ~2,809 seeds/g. ②

A=0.02g, $1.20 **B**=0.1g, $3.00 **C**=0.4g, $6.50

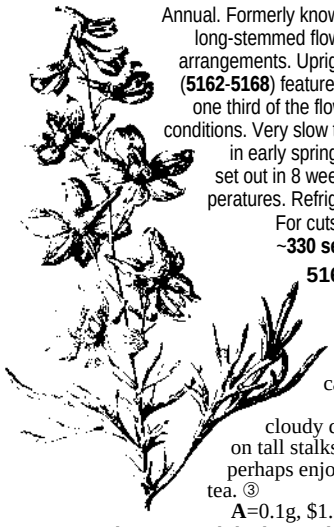
5152HM Helen Mount Johnny-Jump-Up *Viola tricolor* Perennial, Zones 3-9. Also known as Heartsease Pansy. This 4–6" favorite bears tricolor blooms in violet, lavender, and canary yellow. Small abundant flowers like partial shade. Can be direct seeded early spring for flowers late in season or sown in fall for earlier blooms the following year. Some call it invasive, others enjoy its cheerful spreading habit. Flowers make edible decorations with a faint wintergreen taste. ~900 seeds/g. ②③

A=0.5g, $1.10 **B**=1.5g, $2.80 **C**=4.5g, $5.00

5154KM Kiss-Me-over-the-Garden-Gate *Polygonum orientale* Annual. It is easy to imagine an amorous meeting amongst the shelter of these 6–7' annuals, surrounded by large tassels of lightly scented pink blossoms and heart-shaped leaves! Looks like a beautiful giant Smartweed. Our answer to the customer who gave us the best advice we've ever received: "Breathe and laugh a lot. Kiss someone pretty." Although transplanting temporarily sets it back, it grows vigorously to take up a full square yard at maximum size. Blooms from July to frost, sometimes self-sows. Start indoors at 70–75˚, covering the seed, keeping soil moist till emergence. Fussy, slow, erratic germinator. Germination can be improved by stratifying for three weeks. Likes full sun or light shade. Native to China. Offered by Burpee in 1935 for 15¢ per packet as Ruby Gem. ~20 seeds/g. ①

A=1g, $1.40 **B**=3g, $3.00 **C**=12g, $7.50

LARKSPUR *Consolida ajacis*



Annual. Formerly known as *Delphinium consolida*. Delphinium-like long-stemmed flower spikes are used as cutflowers or in dried arrangements. Upright 3–4' tall plants. The Giant Imperial series (**5162**-**5168**) features long racemes of double flowers. Cut when one third of the flowers on the stem are open. Likes cool moist conditions. Very slow to give in to fall frosts. May be direct seeded in early spring or started indoors and grown on at 55˚ and set out in 8 weeks. Does not germinate well in warmer temperatures. Refrigerating for a week will improve germination. For cuts, vase life is 6–8 days. Excellent for drying. ~**330 seeds/g** except Blue Cloud.

5160EG Earl Grey There's a kind of day on the Maine coast when the grey chill invites you to curl up with a cup of Earl Grey tea. That's when the subtle "cool" colors come into their own—their delicate shades can be washed out in full sun but reveal their shimmering clarity on cloudy days. This pearly grey-lavender larkspur on tall stalks fits nicely into such an atmosphere. Or perhaps enjoying it in a bouquet is more your cup of tea. ③

A=0.1g, $1.30 **B**=0.5g, $3.00 **C**=3g, $6.60

5162BS Giant Imperial Blue Spire Dark blue. ③

A=1g, $1.20 **B**=4g, $3.00 **C**=16g, $6.80 **D**=64g, $24.00

5166CR Giant Imperial Carmine All seed is held over; tested 89%. ③

A=1g, $1.10 **B**=4g, $3.00 **C**=16g, $6.80

5168MX Giant Imperial Mixed Pinks, purples, blues and white make a beautiful background, and are good for cutting. ②

A=1g, $1.00 **B**=4g, $2.50 **C**=16g, $5.00 **D**=4oz, $24.00

5169BC Blue Cloud *C. regalis* Blue Cloud doesn't shoot up a single spike like most larkspurs. Instead it sends flocks of bushy 5-petaled rich blue ½" florets on wispy foliage, which *en masse* give the effect of clouds. Its tiny seed pods are equally decorative. Will self-sow vigorously. ~800 seeds/g. ③

A=0.1g, $1.10 **B**=0.5g, $2.80 **C**=5g, $6.40 **D**=50g, $20.00

LAVATERA *L. trimestris*

Annual. Also known as Herb Treemallow; botanical name honors the 16th-century Swiss naturalist brothers Lavater, and its three-month bloom time in warmer climes. Every stalk is covered with single funnel-shaped blossoms. Cut when flowers are unfurling or have just begun to bloom. Vase life is one week. Will survive light fall frosts. Start indoors at 70–72˚ 8 weeks before setting out, growing on at 65–70˚ days and 60˚ nights, or direct seed in sunny spot. Space 18–24". **~150 seeds/g.**

5171LM Mix More than 80% pink shades (some light and some dark) and the remainder white. An explosion of exotic blooms on 2' tall bushy plants great for borders. Lasts in bouquets after most others have shrivelled. ②

A=1g, $1.00 **B**=4g, $2.50 **C**=16g, $5.00 **D**=64g, $12.00

5173TG Tanagra Extra-large 4–5" deep rose flowers with lighter veining borne on robust 3' plants. ③

A=1g, $1.10 **B**=4g, $2.80 **C**=12g, $6.00

5180CP Crystal Palace Blue Lobelia *L. erinus* Perennial in Zones 9-10, grown as an annual. Named for the Flemish botanist Mathias de l'Obel who was a physician to King James I of England. An old variety, offered by Henderson in 1902 for a dime per packet. With bronze-green foliage and a profusion of stunning deep blue flowers, this is the perfect window-box plant. 4" tall, great for edgings, walks and borders. Needs light to germinate. Tolerates some shade. Cannot stand frost. ~30,000 seeds/g. ③

A=0.2g, $1.30 **B**=1g, $3.00 **C**=4g, $5.50 **D**=28g, $28.00

5182RS Ruby Silk Lovegrass *Eragrostis tef* Tender perennial, Zones 10-11, grown as an annual. As one Fedco staffer put it upon seeing a cutting on Nikos' desk, "If someone gave me a bouquet of that, I'd fall in love with them." The romance is in the gracefully curving lines of this feathery grass with 18" stems bejeweled with sprays of iridescent burgundy seed heads. Nikos was entranced by their shimmering red display in the field. Early and persistent, seed heads began on July 10 from an April 11 start and continued into October. Although their luster fades a bit in dried arrangements, the burgundy color endures. If your love life has been a little lacking of late, maybe Ruby Silk is just the charm it needs. Two lots of heldover seed germ at 78%. ~3,750 seeds/g. ②

A=0.1g, $1.30 **B**=0.5g, $3.20 **C**=2g, $8.00

LOVE-IN-A-MIST *Nigella* spp.

Annual. Everlasting grown especially for its spiky decorative seed pods. Germinates 10–14 days at 60˚. Grow on at 60–65˚. Set transplants 6-9" apart.

5184PJ Persian Jewels Mix *N. damascena* (70 days) Profuse blooms in pink, blue and white shades surrounded by a cloud of greenery make lovely bouquets. Seed heads are used dried and are especially nice with a little bit of the flower attached. Direct seed as soon as ground can be worked, or sow indoors in a cool spot 2 months prior to setting out. Plant in full sun. 18". ~760 seeds/g. ③

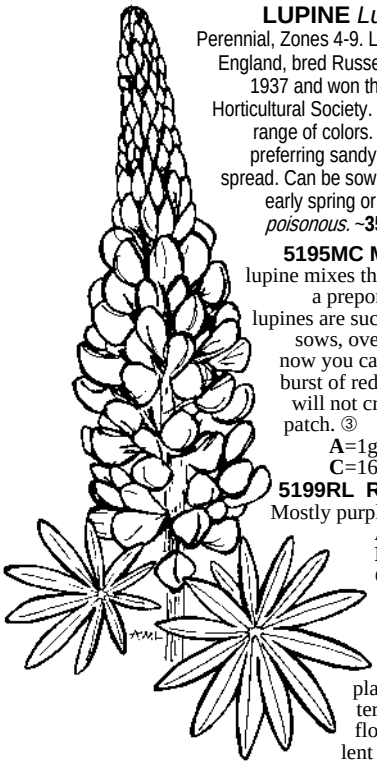
A=0.4g, 90¢ **B**=2g, $2.50

C=14g, $5.00

5187EX Exotic *N. hispanica* Exotic's golden-brown pods are similar to velvetleaf's wonderful starry seed pods with a more spidery appearance that will add interest and volume to any dried arrangement. Unlike velvetleaf, this annual won't be a nuisance in the field. Doubles as a cut-flower with open form, striking maroon stamens and an arresting shade of deep blue, almost purple. Atop 16" stems, the blossoms hold longer in a bouquet than other kinds of Love-in-a-Mist. Likes full sun or light shade. Heldover seed tested at 62%. ~900 seeds/g. ③

A=0.1g, $1.40 **B**=0.4g, $4.00 **C**=2g, $12.00

LUPINE *Lupinus polyphyllus*



Perennial, Zones 4-9. Lupine fanatic George Russell of York, England, bred Russell Hybrids Choice Mix, introduced it in 1937 and won the coveted Gold Medal from the Royal Horticultural Society. Dense spikes with large flowers in full range of colors. They like a cool moist spot in full sun, preferring sandy soil with ample room for their roots to spread. Can be sown indoors in late winter, or outdoors in early spring or late fall. 3'. *Seeds and seed pods are poisonous.* ~**35 seeds/g**.

5195MC My Castle Red Russell In most lupine mixes the red shades are overshadowed by a preponderance of blues. The genetics of lupines are such that, as a patch crosses and self-sows, over time the blues will dominate. So now you can revitalize your patch with a new burst of red. Or, grown separately where they will not cross, you can maintain a solely red patch. ③

A=1g, $1.20 **B**=4g, $3.00 **C**=16g, $5.50

5199RL Russell Hybrids Choice Mix Mostly purple blooms. ②

A=1.4g, $1.00 **B**=7g, $2.50 **C**=28g, $5.50

5203MC Maltese Cross *Lychnis chalcedonica* Perennial, Zones 3-10. Desirable 3' border plant attracts hummingbirds and butterflies by producing brilliant scarlet florets, each a five-part cross. Excellent for cutflowers. Makes a hot color combination with Rudbeckia and Coreopsis. Thomas Jefferson grew these at Monticello in 1807. Start indoors in early spring or midsummer for blooms next year. Do not cover seeds. Likes moist soil and full sun. ~2,000 seeds/g. ③

A=0.4g, $1.00 **B**=2g, $2.50 **C**=6g, $5.00

MARIGOLD *Tagetes* spp.

Annual. "We do not consider a flower garden complete without the good old-fashioned French and African marigolds." –Breck's, 1885. Good for bedding, for cuts, in planters or borders. Their warm colors cheer all summer long and positively blaze in the light of early autumn. Native to the Americas and said to have been sacred to the Aztecs. In 1939 Burpee's Red and Gold hybrid was the first hybrid flower from seed offered commercially in the United States. Fast and easy to grow from seed. Sow after soil has warmed, or inside in a warm (75-80˚) spot, 3 weeks before setting out after danger of frost. Likes heat and full sun. Tolerant to drought. **~300 seeds/g** unless otherwise noted.

African Marigold *T. erecta*

Tallest of the marigolds with largest leaves and flowers. Blooms are fully double and 3–4" across, resembling carnations. Plants make a bold highlight in large borders and crank out cuts.

5211CR Crackerjack Mix Early mix of orange, gold, yellow. Large fully doubled flowers on tall 30" plants that rarely need staking. ②

A=1g, $1.00 **B**=14g, $2.50 **C**=56g, $6.50 **D**=224g, $18.00

5213FL First Lady 1968 AAS, later voted the all-time favorite AAS flower. Lovely 20" border or hedge plant, covered with sunny yellow 3½" double flowers that keep coming till frost. ⑤

A=0.1g, $2.70 **B**=1g, $15.00

5216NC Inca II Mix Fitting sequel to the original Inca series, but stronger, earlier by 7–10 days, and more compact with a new primrose-yellow joining the original yellow, orange and gold. Produces enormous 4" fully double brilliantly colored blooms. Great for massed borders, these compact 12x14" plants allow you to pack them in. Remove spent flowers to promote new blossoms and maintain a clean look. Likes moist well-drained soil. Withstood the 2011 hurricane deluges with exceptional aplomb. ~400s/g. ⑤

A=0.1g, $2.70 **B**=0.3g, $7.00 **C**=1.2g, $20.00

5219VA Vanilla Formerly known as Sweet Cream and actually resembles sweet creamy farm milk—outstanding off-white color. Profuse large 3–4" double blooms on stocky 18" plants until frost. Use for cutting or keep deadheaded to maintain Vanilla's classy good looks. ⑤

A=0.05g, $2.60 **B**=0.2g, $6.60

French Marigold *T. patula*

Small bushy plants with flowers approximately 2" across in a wide range of colors including yellows, oranges, rich reds, mahogany and bicolors. Bloom styles, depending on the cultivar, can be single, crested, semi-double or fully double. Outstanding edging plants bloom early summer till frost and stand well in all weather. See also #**6017** Aurora Yellow Fire in discounted specials.

5224BR Brocade Mix Abundant color on neat, compact 10" plants. Ruffled double flowers in rust, yellow, orange, red and bicolors. ③

A=0.5g, $1.00 **B**=7g, $2.50 **C**=28g, $5.50

5229LD Lemondrop A beautiful true yellow extra-dwarf crested variety. Blooms early, through summer into fall. 6–8". ~640 seeds/g. ③

A=1g, $1.10 **B**=7g, $3.20 **C**=28g, $11.00

5231QS Queen Sophia (60 days) Award-winning anemone-flowered dwarf. Each plant produces many bicolored double blooms. Flowers are deep rusty orange and, as they mature, petals are edged with gold. Named for Queen Sofia of Spain. 1979 AAS, later voted second most-popular AAS flower. 10–12". ③

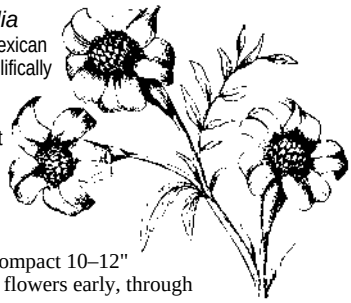
A=0.7g, $1.50 **B**=3.5g, $5.00 **C**=14g, $12.00

5235SP Sparky Mix Combines yellow, gold, orange and red blooms on free-flowering compact 10–12" plants. Double flowers are 2–2½" wide with smoother petals than Brocade. Darold Decker introduction from the late '50s. ②③

A=1g, $1.00 **B**=7g, $2.50 **C**=28g, $5.00

Tashkent OG (100 days) Consult our website for availability, prices and description.

Signet Marigold *T. tenuifolia*



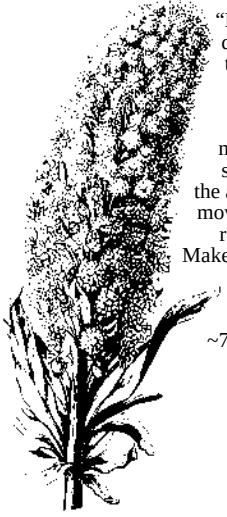
Also known as Gems, once known as Mexican marigolds, date back to 1798. Bloom prolifically with edible ¾" single flowers with yellow centers and a lemony fragrance. Compact mounded plants have finely cut ferny foliage. They don't need deadheading, but benefit from a light shearing in hot weather and from watering in dry spells. **~1000 seeds/g.**

5243LG Lemon Gem (68 days) Compact 10–12" plant bears tiny bright lemon-yellow flowers early, through summer, into fall. ③

A=0.5g, $1.40 **B**=1.5g, $3.50 **C**=6g, $8.00 **D**=24g, $19.00

5246TG Tangerine Gem (68 days) As above, but the tiny fragrant flowers are deep orange. They make colorful tasty additions to salads. ③

A=0.5g, $1.40 **B**=1.5g, $3.50 **C**=6g, $8.00 **D**=24g, $19.00



5255MN Mignonette *Reseda odorata* Annual. "Mignonette should not be forgotten, on account of its delicious odor." –Breck's, 1885. Once fashionable on the balconies of Paris, popular enough to command 7 listings in the 1935 Burpee catalog, it has seemingly lost its cachet. However, a revived interest in scent could reverse the trend, for Mignonette is among the most fragrant. Its insignificant yellow-green blossoms send the enticing scent of raspberries wafting through the air. Less than a foot high, it can be grown in pots and moved for best effect; however, its scent will fade if it is removed from full-day sun. Direct seed; do not cover. Make succession plantings for continuous blooms. Prefers fertile well-drained soil and cool weather. Burpee claimed a light sandy soil brings out its most pronounced perfume. All heldover seed, tested at 73%. ~750 seeds/g. ③

A=1g, $1.00
B=4g, $2.50
C=16g, $6.00
D=64g, $12.00

June 1st
Thunderstorm last night;
today, clouds of dragonflies.

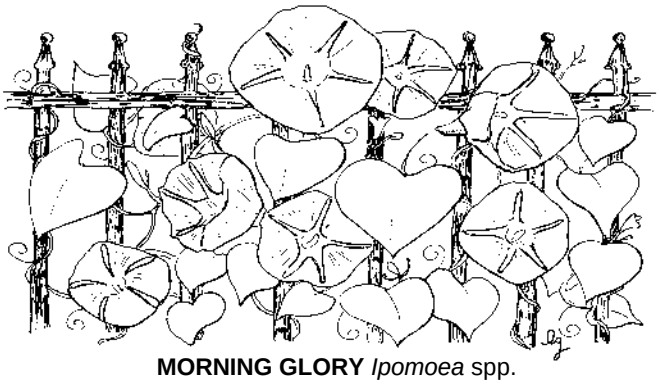
Ephemeral
as blue-eyed grass
blooming its one June day.

5257FX Foxtail Millet *Setaria macrocheata* Annual. Its graceful 3–6" golden seed heads bobbing on an August breeze attract attention even before harvest. After harvest, Foxtail Millet makes a striking counterpoint in floral displays. Customers ask for this specific strain because its heads, covered with golden-russet hairs, are softer and look less seedy than other types. Plant in June, harvest mid to late August. ~450 seeds/g. ③

A=1g, $1.10 **B**=4g, $2.80 **C**=28g, $6.50

5259PM Purple Majesty Millet *Pennisetum glaucum* (120 days) Annual. Bursting onto the scene with a 2003 AAS award, this pearl millet accelerated the ornamental-grasses trend. Distinguished 3–5' tall background plant with deep-purple, almost black, corn-like foliage has purple seed spikes nearly a foot tall and an inch around. The immature plumes, looking like purple cattails, can be used in arrangements or left on the plant to attract birds. Tolerates hot dry weather, likes sun and can be cultured like sunflowers. Pamela and Frank Arnosky, in *Growing for Market*, reported that it was a sensational seller. However, they cautioned that some cuts left in their packing shed for a few days turned solid yellow with pollen that had an odor like burnt antifreeze. They advise cutting the spikes immature, just as they emerge from the last leaf, to circumvent the pollen. As for the smell, they concluded they could put up with it. "Smells like money." With all the hype, the seed is exorbitantly expensive. We've had to restrict our packets to about five seeds to keep our price within reason. ~116 seeds/g. ⑤

A=0.05g, $2.50 **B**=0.2g, $7.00 **C**=0.6g, $18.00



MORNING GLORY *Ipomoea* spp.

Annual. Easily grown climber with trumpet-shaped flowers provides color and shade, decorates fence or post. Plant with eastern exposure for best results. Nick seeds with a file and soak overnight to speed germination. Germinates in 2 weeks at 75–80˚. Sow outdoors after danger of frost or indoors in peat pots as they resent transplanting. Overly rich soil will yield excess foliage and sparse blooms. **~25 seeds/g.**

5271FS Flying Saucers *I. nil* Seedsman Darold Decker created these gaudy 4" open trumpets just three years after the Russians sent Sputnick into orbit. Bicolor features clear white cups streaked with sky blue. The swirly blue patterns create the ethereal saucer effect that inspired its name. Can be brought inside in the bud stage for a week-long show as the amazing blossoms unfurl their patterns. Climbing vine grows 8–10'. ③

A=1.5g, $1.10 **B**=6g, $2.80 **C**=18g, $5.00 **D**=54g, $12.00

5273SH Scarlett O'Hara *I. n.* Very large wine-red flowers on 10' vines. Won 1939 AAS shortly after publication of *Gone with the Wind*. ②

A=3.5g, $1.20 **B**=14g, $3.20 **C**=56g, $10.00

5274SS Sunrise Serenade *I. n.* A recently rediscovered heirloom double morning glory. I first caught a glimpse of an unstaked plant snaking along in the undergrowth of a friend's garden and was arrested by the large 1–3" ruby-red blooms with white throats. As I bent closer, I was amazed by the frilly slightly wavy extra petals. A vigorous 12–15' plant, it needs to be tied up in order to climb. When thus displayed, the flowers contrast nicely with the heart-shaped green leaves. Often the first morning glory to bloom, also stays open longer than the singles. Heldover seed germinates at 94%. ⑤

A=0.3g, $1.60 **B**=1.2g, $5.50 **C**=6g, $14.00 **D**=24g, $50.00

5276CM Carnevale de Venezia Striped Mix *I. purpurea* 6' vigorous climbers quite striking with their masses of white flowers, some with blue stripes, some with pink, some with both in a wide array of diverse patterns. The effect is more cheery and naive than the full range of exotic masks and costumes displayed in the annual Carnival of Venice. More like a carnival pinwheel handpainted in the '60s. Plant them where they'll brighten up your morning. ③

A=1g, $1.20 **B**=3g, $3.00 **C**=15g, $10.00 **D**=90g, $35.00

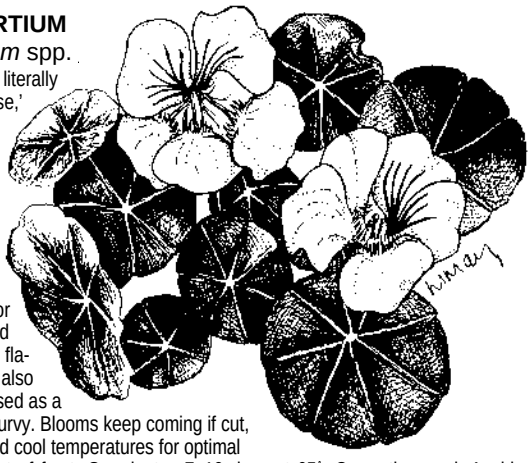
5277KO Kniola's Purple OG *I. p.* (50 days) Beautiful glowing rich deep purple flowers vibrate against lush green foliage. Unlike most other morning glories, Kniola's starts blooming while it is only 2' tall and still vining. As the vines climb on to 8–9', the blooms continue, lasting the entire season. The deep flowers have a magenta star that radiates out from their pale pink-white throats. An heirloom discovered by Mr. Kniola at an abandoned farm in Indiana. Nicholas Lindholm acquired seed from J.L. Hudson in 1993, thence passed it on to Roberta Bailey who has been maintaining it and culling out the magenta off-types. MOFGA-certified. ①

A=0.25g, $2.50 **B**=1g, $7.50

5279HB Clarke's Heavenly Blue *I. tricolor* (115 days) Classic morning glorly. Intense azure blooms lighten toward center; a sun-loving vine. 12'. ②

A=3.5g, $1.00 **B**=14g, $2.80 **C**=56g, $7.00 **D**=1lb, $28.00

NASTURTIUM *Tropaeolum* spp.



Annual. The name literally means 'twisted nose,' from the Latin *nasus* for nose and *tortus* for twist. Edible flowers with spicy sweet fragrance lend a peppery-sweet taste to salads, with each color adding contrast and subtle variations in flavor. Round leaves also edible. Formerly used as a remedy against scurvy. Blooms keep coming if cut, needs moisture and cool temperatures for optimal blooming. Intolerant of frost. Germinates 7–10 days at 65˚. Cover the seed. Avoid excess nitrogen, but don't relegate nasties to the worst soil. Likes full sun. Start indoors or direct seed after last frost. **~6 seeds/g.**

5280AL Alaska Mix *T. majus* (60 days) Striking variegated green and white foliage will make a formidable bush if you feed it heavily. But go easy on the nitrogen if you want to eat lots of its tangy yellow and orange blossoms. A great plant for hanging baskets. 16". ②

A=2g, $1.00 **B**=8g, $2.50 **C**=24g, $5.50 **D**=1lb, $29.00

5282EI Empress of India *T. majus* (60 days) Hailed as a "great novelty" when introduced in 1884, and still popular today. Dark purplish-green leaves and stems make a perfect background for the spicy-hot brilliant crimson-scarlet flowers that stand out in bold relief. A good contrast with other varieties in your nasturtium patch. Do not feed heavily. 16" plants. ③

A=3g, $1.10 **B**=9g, $2.50 **C**=27g, $7.00 **D**=1lb, $42.00

Jewel Mix *T. majus* (42 days) Bushy variety holds its blooms above the foliage. Early free-flowering blend of colors. 16". Long our best-selling flower variety.

5288JM Jewel Mix ②

A=4g, $1.10 **B**=16g, $3.20 **C**=64g, $10.00 **D**=1lb, $32.00

5289JO Jewel Mix OG CCOF-certified. ③

A=4g, $1.70 **B**=16g, $5.50 **C**=64g, $18.00 **D**=1lb, $76.00

5291TC Tall Climbing Mix *T. majus* (65 days) Tall trailing mix to 4–6' in red, orange, gold and exquisite bicolor shades. The red blossoms have a spicier taste than those of lighter colors. Plants will spread and fill in a huge space but having no tendrils cannot, strictly speaking, climb. The most prolific blossom set of any of the nasturtiums we have tried. ②

A=4g, $1.10 **B**=28g, $3.20 **C**=84g, $7.00 **D**=1lb, $27.00

5293PM Peach Melba *T. minus* (60 days) Named for the dessert—peaches with raspberry sauce—Escoffier created to honor 19th-century operatic soprano Nellie Melba. Recommended by Eva Sommaripa and other growers who treasure its unique delicacy. Primrose-cream blossoms with pearly red centers look like miniature cut peaches with dollops of sauce. Sets its abundant blooms above the compact lily-pad foliage. Seed is expensive but worth it. ③

A=1g, $1.60 **B**=4g, $4.00 **C**=16g, $12.00 **D**=64g, $30.00

5295WB Whirlybird 7-Color Blend *T. minus* (60 days) Has large spurless upward-facing flowers borne above the foliage. Compact non-trailing plant habit. Recommended for commercial growers. 12" plants. ③

A=2g, $1.10 **B**=6g, $2.80 **C**=24g, $6.00 **D**=1lb, $45.00

5300LN Only the Lonely Nicotiana *N. sylvestris* Annual. Arrived in cultivation from Argentina in 1899 and offered by Geo. B. Haskell Co. of Lewiston, ME, for a nickel per packet in 1904. Also known as Woodland Tobacco, featuring clusters of drooping tubular white blossoms that perfume the garden day and night. In dwarfing nicotiana, breeders took away its fabulous fragrance. Lonely, a stately 5', delivers the full powerful scent its more compact cousins lack. Plant it near a door or under your bedroom window where you can enjoy the aroma during the night. Germination is 10–12 days at 65–70˚. Light enhances germination. Grow on at 50–55˚. ~29,000 seeds/g. ①

A=1g, $1.30 **B**=4g, $4.20 **C**=16g, $15.00

5303RM Royale Mix Painted Tongue *Salpiglossis sinuata* Annual from the Andes noted for its exquisite velvety texture. Popular as a cutting flower in Victorian times, it was often planted in geometric patterns in an art form known as mosaiculture. Extremely floriferous 15–20" plants produce masses of elegant 3" trumpet flowers in a broad range of colors from chocolate, red, purple and yellow to purple-orange and pale blue bicolors. Germinates in 15 days at 70˚. Likes long days, lots of light and cool nighttime temperatures (50˚) to grow on. Set out in a location with partial shade, good drainage and protection from the wind. Deadheading prolongs blooms. ~4,500 seeds/g. ④

A=0.01g, $2.10 **B**=0.05g, $6.00

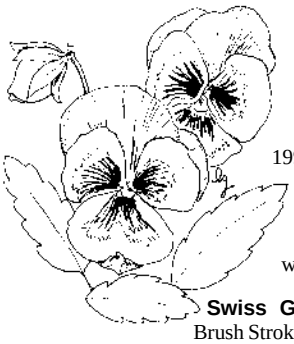
PANSY *Viola* spp.

Annual or short-lived perennial. Burpee's in 1888 called the pansy "the most popular of all flowers grown from seed," and sold more than 100,000 packets per year. James Vick's Sons sold 27 different kinds and mixtures in 1895. For thoughts, remembrance, from the French *pensée.* Old-fashioned bedding plant thrives in cool moist conditions. Start 2 months prior to planting in a cool (60–65˚) place. Cover seed to germinate. Takes about 12 days. Grow on in very cool temperatures—preferably below 50˚. Likes partial sun. **~700 seeds/g** except where noted.

5304BG Blueberry Glow *V. cornuta* 10–12" with 1" flowers. Rusty brown lower edge shades into a dark burst edged with gold, then to a violet and pale violet at the top edge. Yellow center. All that shading gives a multicolored effect. Still growing strong for Donna Dyrek after two winters and blooming exuberantly on Oct. 2. Heldover seed tested at 73%. ④

A=0.02g, $1.90 **B**=0.1g, $5.00 **C**=0.4g, $12.00

5305BS Brush Strokes *V. c.* As if an artist had taken a fine brush to lay delicate bright stripes on its palette of solid colors. Purple, pink, yellow and light blue striped with white and yellow strokes. Donna's blossomed the first of July from an April 8 start and are among the first to revive in the spring. Dwarf 6" plants with large fragrant faces. ~1,100 seeds/g. ⑤



A=0.02g, $1.90 **B**=0.1g, $5.00 **C**=0.4g, $12.00

5307JJ Jolly Joker *V.* x *wittrockiana* 1990 All-America winner. Does not display the familiar flat "face" we've come to expect on our pansies. Instead its vibrant color combination of orange and purple will make you take notice. One of the hardiest pansies, as well as one of the slowest to "stretch." 8". ②

A=0.1g, $2.10 **B**=0.5g, $6.00

Swiss Giant Regular Mix Replaced by #**5305** Brush Strokes. *No longer available.*

5314PE Pearly Everlasting *Anaphalis margaritacea* Perennial, Zones 3-8. You may have seen these blooming from midsummer to fall in the full sun or partial shade along the edge of a field. Big clusters of 1/2" white papery flowers on 18–24" plants live up to their name and hold their pure white color without turning brown when dried. Best picked for drying before the yellow centers are visible in order to prevent an unattractive exploded look. Also use fresh in bouquets or leave outdoors to attract pollinators. Good for naturalizing in evenly moist soil but will tolerate drought. Known by the Passamaquoddy as "women's tobacco" because it is milder than Red Willow, and used for calming the mind, for headache and insomnia, and as a smudge or offering. Direct sow after last frost so that plants are 18–24" apart. ~8,000 seeds/g. ②

A=0.1g, $1.50 **B**=0.3g, $3.40 **C**=1.2g, $12.00

PETUNIA *P.* x *hybrida*

Annual. "If I were limited to one flower with which to decorate my home I would choose Petunias." –Park's Flower Book, 1934. Start indoors at 70–75˚ and grow on at same temperatures for 8 weeks before setting out after danger of frost. Do not cover seeds; light aids germination. Use loose medium and avoid overwatering. Drought-tolerant sun lovers. All F-1 hybrids. **~10,000 seeds/g.**

5321DD Daddy Mix "Who's your daddy?" It's a hybrid, so we don't know. Very showy grandiflora has big 4" ruffled blooms in shades of light blue, orchid, peppermint, pink, plum and strawberry with darker veins. Stunning in baskets, these uniform plants also exhibit good weather-tolerance when planted in full sun. 12–15". ⑤

A=0.03g, $3.30 **B**=0.12g, $12.50

Wave Series Petunia

Our customers have caught The Wave. Each plant carpets the ground with a 4x4' spread of vivid color. This versatile landscaping tool can be used as a low hedge, as a ground cover, or trailing from pots. Wave showed extreme drought tolerance in our trial, sailed through light frost, and bounced back after torrential rain. Although never deadheaded or cut back, the 3" flowers just kept coming and coming. Plant in full sun where its robust performance and light fragrance can sweep you away. All varieties pelleted seed, packed by count and shipped in protective vials so none get crushed.

5323BW Blue Wave Suggested by Nan King of Walpole, NH. She prefers Blue Wave's plant habit to that of Purple, finding it less rangy, more floriferous, and the foliage better at covering the underpinnings. Has bluish-purple flowers and mounding appearance that spreads large. 2003 AAS. ⑤

A=10 seeds, $2.40 **B**=40 seeds, $8.80

5325PW Pink Wave Pink, with white throats. ⑤

A=10 seeds, $2.40 **B**=40 seeds, $8.80

5326PU Purple Wave Vivid fuchsia. 1995 AAS. ⑤

A=10 seeds, $2.40 **B**=40 seeds, $8.80

5328TW Tidal Wave Silver Despite its name, more a very pale purple than silver, with darker purple veining. 2002 AAS. ⑤

A=10 seeds, $2.40 **B**=40 seeds, $8.80

PHLOX *P. drummondii*

Breck's sold 15 different kinds in 1885. The word phlox signifies 'a flame.' Phlox is among the most colorful annuals for summer and fall beds, borders or window boxes. Start early indoors or direct sow in spring. Likes moist well-drained soil in full sun. One of the longest lasting in the vase. About the last to succumb to frost. **~500 seeds/g.**

5335PH Drummondii Mix Annual. Large-flowered mix of crimson, scarlet, pink, white and salmon with white eyes. 6–8". ②③

A=0.4g, $1.00 **B**=2g, $2.50 **C**=8g, $5.50

5337TW Twinkle Annual. Also called Sternenzauber. These cuties are short 8" little bicolored stars in typical phloxy colors: white with shades of pink, lavender, purple and red. The blossoms have little star points with white edges, hence the twinkle. Sales need to increase to keep these stars twinkling. ③

A=0.4g, $1.10 **B**=2g, $2.80 **C**=8g, $6.00

5339PH New Hybrids Mix *P. paniculata* F-1 hybrid. Perennial, Zones 3-9. Blooms from June till frost. Excellent for borders and cutflowers. Mix of white, pinks, reds and lilacs. Freeze seeds 10 days before sowing indoors, or direct seed in cold soil. Slow germinator, takes 3–4 weeks. Likes full sun. 3'. ~111 seeds/g. ③

A=0.1g, $1.20 **B**=0.3g, $2.80 **C**=0.9g, $6.00

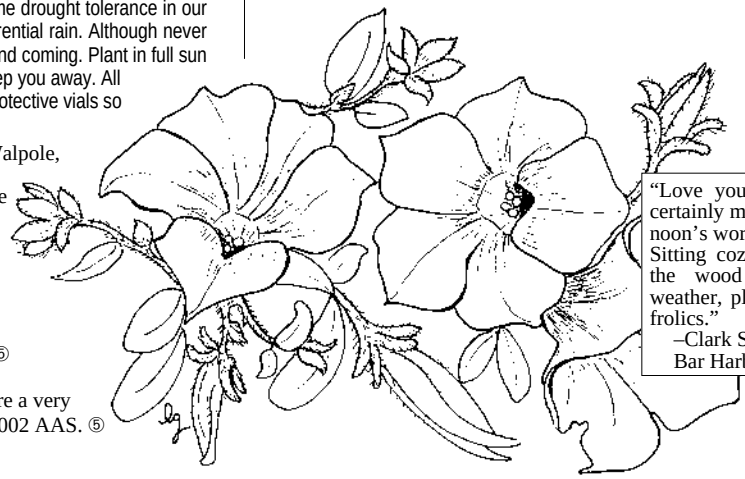
5341PF QIS Formula Mix Pincushion Flower *Scabiosa atropurpurea* Annual. Our latest attempt to return the old-fashioned but underrated Pincushion Flower to our catalog. We had some success last year and hope sales will continue to increase. These quilly beauties are perfect for cuts, each 2" bloom is a rounded mass of tiny florets on a long wiry stem. Harvest when blossoms are almost fully open. Also excellent for drying. Formula mix is nicely balanced, featuring purple, lavender, red, pink, white and almost-maroon. ~150 seeds/g. ③

A=0.2g, $1.40 **B**=1g, $2.60 **C**=4g, $8.00

Pinks See Dianthus, #**5061**-**5065**.

5343RP Flamenco Red Hot Poker *Kniphofia uvaria* Perennial, Zones 5-9. You won't need to build a casino to get into this game of poker. If you get your thrills from hot colors rather than hot hands, this Red Hot Poker is no gamble at all. Our ante is only $1.50 and there will be many winners. It will flower the first year up to four weeks earlier than other standard varieties, setting spectacular 8" spikes atop sturdy 32" stems, in a riot of yellow, orange and fiery red tubular flowers. A field of these along the road can take your breath away. Blooms July-September and makes an unusual accent in cutflower arrangements. Likes well-drained sunny locations. Space at 18–24". For overwintering, mulch to protect the crowns from moisture and heaving. AAS. ~450 seeds/g. ②

A=0.04g, $1.50 **B**=0.12g, $3.00 **C**=0.36g, $6.00



"Love your online ordering! It certainly made for a wintry afternoon's worth of summer fantasy! Sitting cozily blanketed next to the wood stove in sub-zero weather, planning May's garden frolics."

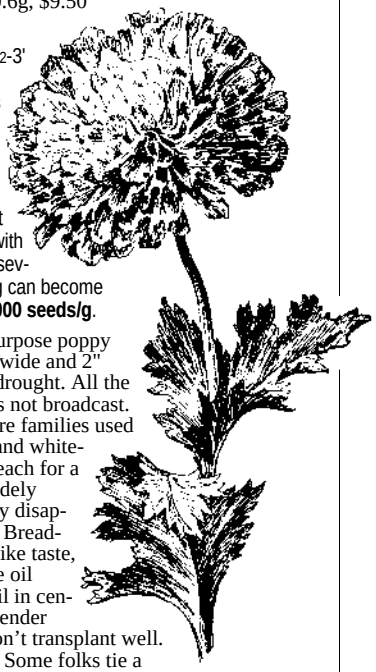
–Clark Stivers & Laurie Beal, Bar Harbor, ME

5345AP Dwarf Allegro Oriental Poppy *Papaver orientale* Long-lived perennial, Zones 2-8, grows 16". Fuzzy fern-like leaves, showy buds open to dazzling scarlet blooms with contrasting black eyes. Sow in June, transplant in October for flowers the following summer. Fits well with border perennials and ornamental grasses because plants go dormant after spring flowering. ~5,000 seeds/g. ③

A=0.05g, $1.40 **B**=0.2g, $3.50 **C**=0.6g, $9.50

POPPY *Papaver* spp.

Annual. Sensuous luxurious flowers, about 2½-3' tall. Need light to germinate. Sow outside in spring after frost or sow in fall for early blooms the following summer. Thin to 9–12". Like full sun. Will self sow. We offer two heirloom breadseed varieties especially suitable for baking. Poppies make wondrous cutflowers: choose buds that have straightened up but not quite opened. Immediately sear the cut stem with a lighter and put in water. Poppies open after several hours—an austere bouquet in the evening can become a riot of colors by the next morn. **~2,000 to 7,000 seeds/g**.



5350EO Elka OG An unusual double-purpose poppy sporting enormous seed heads up to 1½" wide and 2" high in good years, somewhat smaller in drought. All the heads are now unvented so that the seed is not broadcast. From Chrenovec in central Slovakia, where families used to grow both the black Breadseed poppy and white-seeded Elka, and collect 50 kilograms of each for a year's cooking. When walnuts became widely available in stores, Elka almost completely disappeared. Lacks the distinctive flavor of the Breadseed variety but sweeter, with a more nutlike taste, none of the bitterness, and over 50% more oil content, making perhaps the best edible oil in central Europe. Plants grow 4' with white-lavender single blossoms, like calcium-rich soil, don't transplant well. For best results thin to at least 5–6" apart. Some folks tie a group of plants together for support against wind breakage. Isolate from other poppies by at least 250' if you wish to save seed. ☙1995. MOFGA-certified. ①

A=0.1g, $1.20 **B**=0.3g, $3.00 **C**=1.2g, $6.00 **D**=6g, $12.00

5351ZO Ziar Breadseed OG Twin to #**5350** Elka bred to eliminate the vents in its large seed head so the blue seeds stay in the heads to be collected. Ornamental single pink to red petals with centers ranging from pale red through dark colors. Although the first batch of seeds had some difficulty adapting to the cold climates of Canada and Maine, Ziar has been selected over the past 20 years for better cold survival. Slovakian variety once a mainstay of the local cuisine. Two lots of heldover seed; minimum germ 83%. ☙1996. MOFGA-certified. ①

A=0.1g, $1.20 **B**=0.3g, $3.00
C=1.2g, $6.00 **D**=6g, $12.00

5353BP Black Peony We'd seen poppies in a lot of different colors, but never one like this fully double ruffled flower of the deepest purple, almost black. Strong tall stems. 2'. ⑤

A=0.2g, $1.10 **B**=1g, $2.80
C=5g, $5.50

Carnation Rose OG No crop; *not available in 2014.*

5359DF Danish Flag According to legend, Denmark's flag came from the sky to King Valdemar II in 1219. The origins of the *Danebrog* or Danish Flag poppy, are more obscure but predate 1888. Flag is named for the white spots at the base of the petals that form a cross in the center of the brilliant scarlet flowers somewhat mimicking the Danish flag. The lush single blooms, more than 4" across with fringed petals, sit atop 27" stems with blue-green foliage. After the showy blooms, the attractive large seedheads are ideal for drying. ③

A=0.2g, $1.10 **B**=1g, $2.50 **C**=7g, $5.50

5366QO Drama Queen OG I cringed when I first heard this name from Donna and Nikos. Surely another example of the hyperbole of those shameless variety-namers. Not this time. The Lindsay Lohan of poppies is everything its name suggests. That could explain why so many photographs of it show up on the internet. Petals are deeply cut with irregular pointy fringes and shaded with deep purple and violet near the center, which morphs to vivid raspberry toward the edges. Yellow-green centers with prominent creamy-yellow anthers accentuate the 4–5" flower. Either gorgeous or hideous, depending on your point of view, but undeniably dramatic. 3' tall. MOFGA-certified. ①

A=0.2g, $1.40 **B**=1g, $3.00 **C**=6g, $12.00

5368FO Flemish Antique OG An old-fashioned cottage garden charmer adds a touch of Victorian elegance. Whorled petals of creamy ivory brushed with touches of salmon-red in singles, semi-doubles and doubles now true to the original strain. Blue-green foliage makes an intense backdrop for these 4" peony blooms. 3' plants stood the rains with aplomb and were still blossoming in October. Very showy in indoor arrangements. After the blooms are done, the large blue-green oblong seedpods are highly prized as everlastings. WA-certified. ①

A=0.2g, $1.20 **B**=1g, $2.80 **C**=5g, $6.00

5371RO Fluffy Ruffles OG Color range includes red, pink and white. Double, but not a full pompon; the fringes on the petal ends give it a spider-aster or cactus-dahlia look. Reblooms after deadheading, though the blooms are smaller. 3'. Heldover seed tested at 78%. MOFGA-certified. ①

A=0.2g, $1.20 **B**=1g, $2.80 **C**=5g, $6.00

5374LB Ladybird Not a reference to Lady Bird Johnson, though it might be appropriate to name a flower for her since she was instrumental in decorating our highways with wildflowers when she was first lady. Ladybird is instead British for ladybug, as the four black dots in the center of these fire engine-red blooms make a more-than-fanciful resemblance to the beloved beetle. Compact 1½" delicate single blooms atop wiry 15" stems. This cottage variety, great for edging the flower garden, dates back to 1876. Bloomed June 30 from a May 2 planting. ③

A=0.2g, $1.20 **B**=1g, $2.80 **C**=4g, $6.00

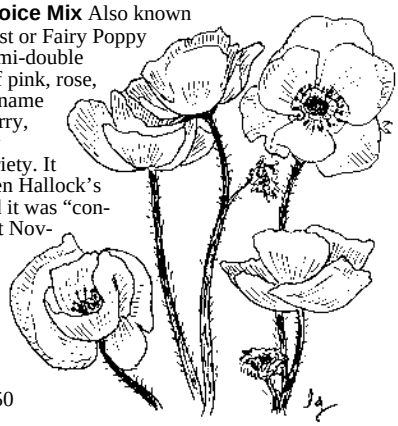
5377LO Large Lavender OG Passed along to Jeanne Griffin by a German friend, these tall poppies bloom in July with 2½–3" single flowers that have exquisitely shaded and fringed petals. Long blooming period. Large 1" seed pods can be used in dried arrangements. *Short crop this year; order early.* MOFGA-certified. ①

A=0.2g, $1.20 **B**=1g, $2.80

5378SO Scarlet Peony OG Large 5" bright scarlet blooms make a stunning show in the garden, especially en masse. Fully double blossoms tightly packed with silky deeply fringed petals draw attention in much the way a cheerleader's pompoms do. Very floriferous from mid-August on. 2–3' tall. MOFGA-certified. ① **NEW!**

A=0.2g, $1.20 **B**=1g, $2.80

5379SH Shirley Double Choice Mix Also known as Corn Poppy, was called Ghost or Fairy Poppy early in the century. Elegant semi-double blooms all summer in shades of pink, rose, salmon, scarlet and white. The name Shirley refers to the town in Surry, England, where the Rev. Henry Wilkes originally raised the variety. It was relatively new in 1890 when Hallock's Famous Long Island Seeds said it was "conceded by all to be still the finest Novelty that we can give you this spring. The flowers are like fairy work…so silky and tissue-like…Bending and trembling with life-like beauty, the surface is a perfect shimmer of light and color." 2½' tall. ②



A=0.7g, $1.00 **B**=7g, $2.50
C=28g, $5.50

CALIFORNIA POPPY *Eschscholzia californica*

Annual. The state flower of California is excellent for borders, rock gardens, bedding. Likes full sun. Do not transplant. Direct seed in May after soil has begun warming. Make succession plantings for blooms all summer.

5381JB Jelly Beans Unlike the jelly beans of our childhood, these are eye candy only, except to the bees and hover flies attracted by their nectar. These Jelly Beans are vibrant in their bright irresistible colors: bubble gum pink, white, orange, raspberry red, pale orange—some striped, some doubled—against feathery silver-blue foliage. From an April 11 start, Donna's first blooms were on Bastille Day. Still bloomed after a 27˚ mid-October frost in 2012. 8–12" tall. For a break from the same old same old, get Jelly Beans! ~700 seeds/g. ⑤

A=0.1g, $1.20 **B**=0.4g, $3.20
C=2g, $10.00 **D**=8g, $24.00

5382MB Mission Bells Enjoy these semi-double 2–3" orange flowers with a few yellows and pinks mixed in while you can. Our mission is to replace these with #**5381** Jelly Beans. All seed held over; 80% germ. ~650 seeds/g. ②

A=0.5g, $1.00 **B**=2g, $2.50

"Where would we be without you? Thank you for saving us money, educating and inspiring us."
–Elizabeth Bangley, Hawk's Hill Farm, Georgetown, PA

5384MT Yellow Mexican Tulip Poppy *Hunnemannia fumariifolia* Perennial in Zones 9-11, grown as an annual. The contrast couldn't be greater between this Tulip Poppy and #**5366** Drama Queen. If you prefer silky, dainty and delicate to showy, gaudy and garish, this is the one for you. Its classic lemon-yellow tulip-shaped blooms sit atop lacy ferny grey-green foliage. Although said to dislike wet feet, in 2011 it bloomed almost continuously all late summer and early fall, recovering valiantly from the drenching rains of three consecutive hurricanes. A generic form of a cultivar dating from 1934. 2' tall. ③

A=0.2g, $1.50 **B**=1g, $3.80 **C**=5g, $15.00

Tequila Mix Portulaca *P. grandiflora* (56 days) Cold turkey for Tequila lovers this season. Crop failure; *not available in 2014.*

Quaking Grass *Briza maxima* Annual. Has quaked its last in this catalog because of slow sales. *No longer available.*

Queen of the Meadow See #**5150** Joe Pye Weed.

RUDBECKIA *R.* spp.

Named for Olaf Rudbeck (1660-1740), professor of botany at Uppsala in Sweden and a teacher of Linnaeus. Improved versions of these rugged North American native Black-Eyed Susans outstrip their wild counterparts in size and color. Drought-tolerant. Start indoors at 70˚ and do not cover the seed. Germinates in 14–21 days at 70˚. Transplant after danger of frost at 15–18" apart. Likes full sun, good drainage.

5393GS Goldsturm *R. fulgida* Perennial, Zones 3-10. Domesticated cousin of the beloved Black-Eyed Susan, Goldsturm offers a profusion of shining golden-yellow flowers with dark central cones in August and September. Transplants well and has much larger flowers—up to 5" across—than the common wildflower. The 2' plants have long strong stems ideal for cutting and flowers last long in the vase. Start indoors 8–10 weeks before last frost. ~1,105 seeds/g. ②

A=0.1g, $1.40 **B**=0.4g, $3.00 **C**=1.2g, $6.20

5395GD Gloriosa Daisy *R. hirta* Annual. These workhorses deserve a place in your garden. Impervious to the hottest sun and the poorest soils, they reward even the novice with nonstop flowers from late July until fall frosts. Flowers up to 6" on 2–3' stems have the hues of mixed sunflowers: yellow, gold, orange and reddish brown, surrounding chocolate-brown centers. They enhance the border and can be brought inside as cuts. Transplant or start seeds directly outdoors as soon as the ground can be worked. Space about 1' apart. ~1,800 seeds/g. ③

A=2g, $1.20 **B**=6g, $3.00 **C**=24g, $6.50 **D**=72g, $18.00

5397GL Goldilocks (86 days) *R. h.* Annual. Brighten bouquets and beds with these 4" golden-orange blooms with deep-set brown eye. Long strong stems set on 24–30" plants make this an outstanding cutflower. Enough are fully double to give the effect of a patch of chrysanthemums. ~1,800 seeds/g. ③

A=0.1g, $1.50 **B**=0.3g, $3.60 **C**=1.2g, $8.50

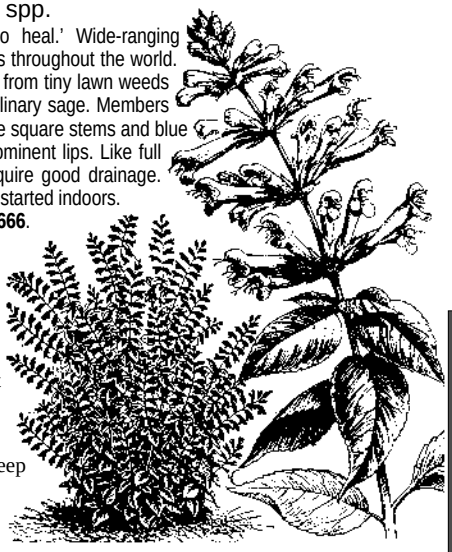
5399PS Prairie Sun (88 days) *R. h.* Annual. These are so pretty they will make you smile. Sixteen pointy golden petals with light yellow tips encircle a subtle green center. Flowers are very large and distinctive. Branching 24–30" plants have long stems, ideal for cutflowers. Judges on two continents were so impressed that they made Prairie Sun both an AAS and a Fleuroselect winner in 2004. ~1,500 seeds/g. ②

A=0.02g, $2.40
B=0.1g, $7.20

SALVIA spp.

From the Latin *salvere*, 'to heal.' Wide-ranging genus with over 900 species throughout the world. In the Northeast they range from tiny lawn weeds to showy ornamentals to culinary sage. Members of the mint family, most have square stems and blue or lavender flowers with prominent lips. Like full sun and dry conditions, require good drainage. In our climate, all should be started indoors.

See also sages #**4664**–**4666**.



5406BB Blue Bedder *S. farinacea* Perennial in Zone 8-10, grown as an annual. True blue flower spikes are abundant for weeks on bushy 3' plants. Grey-green foliage. Light aids germination. Start indoors in warm location (do not cover seed) 4–6 weeks before last frost, keep fairly dry for best foliage color, and transplant outdoors after danger of frost. ~900 seeds/g. ③

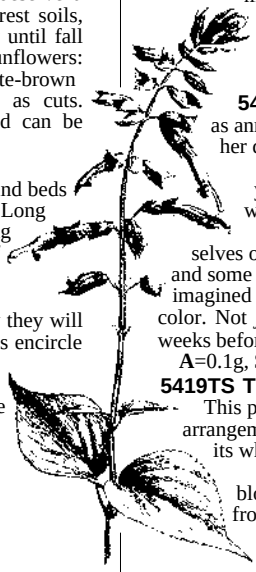
A=0.2g, $1.10 **B**=1g, $2.50 **C**=4g, $7.00

5411GS Gentian Sage *S. patens* Perennial in Zone 8-10, grown as an annual. Featuring magnificent blue blossoms! Dynamic flower shape! Clear bright flowers are one shade lighter than cobalt blue. Each flower on the monkshood-like spike has a top petal "hood" that lunges across the pendant lower petals. Flower spikes 12–15" long, good for cutting. Start indoors 12–14 weeks before setting out. 2½' plants. ~130 seeds/g. ③

A=0.1g, $1.40 **B**=0.3g, $3.00 **C**=1.2g, $6.00 **D**=6g, $24.00

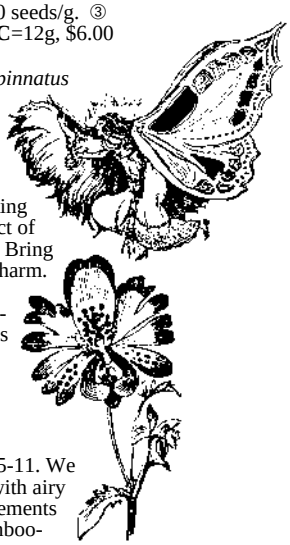
5417SS Seascape *S. f.* F-1 hybrid. Perennial, Zones 8-10, grown as annual. "Not another salvia!" I groaned when Nikos informed me of her desire to add this cultivar. And then I got to see it. Even from way across the garden, this stunning mix of blues and silver will grab your attention, be the day foggy and overcast or bright and sunny, whether you are near the coast or not. Early flowering blossoms on compact branching 13" plants excel whether clumped by themselves or mixed amongst others. Best in full sun, and tolerant of poor soil and some drought. Gazing at them in Donna's garden, though well inland, I imagined I was sailing on Penobscot Bay admiring the alternating waves of color. Not *just* another salvia, these are divine. Start seeds indoors 10–12 weeks before last frost for best bloom. ~1,050 seeds/g. ④ **NEW!**

A=0.1g, $1.60 **B**=0.3g, $3.20 **C**=1.2g, $9.00 **D**=6g, $35.00



5419TS Tricolor Salvia *S. viridis* Annual. Also known as Painted Sage. This prolific little beauty is splendid as a dried flower or a filler in fresh arrangements. Although its leaves are entirely green, its name comes from its white and blue flowers set off by large pink-to-purple bracts. Easily air-dried, it will remain very colorful, flowering until frost if old blooms are removed. 18" stalks. Start indoors 4–6 weeks before last frost. Needs well-drained soil. ~350 seeds/g. ③

A=1g, $1.20 **B**=4g, $3.00 **C**=12g, $6.00

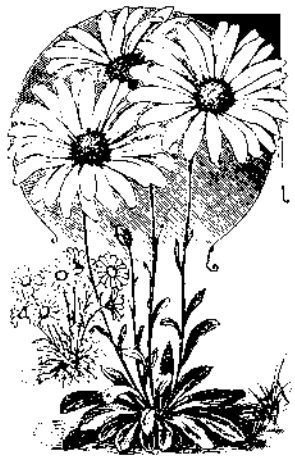


5422SC Angel Wings Schizanthus *S. pinnatus* Annual. Also known as Butterfly Flower or Poor Man's Orchid. Bring a hint of the exotic to your garden by growing this colorful array of delicate orchid-like flowers with pansy faces. Softly complementary shades of pink, violet and rose with contrasting blotched and stippled throats create the effect of an 18" fern covered by rare little butterflies. Bring cut sprays of bloom indoors for a touch of charm. Do not cover the fine seed with soil, but do cover flats or pots with a sheet of black plastic because darkness aids germination. Takes 1–2 weeks to germinate. Heldover seed tested at 80%. ~1,517 seeds/g. ③

A=0.2g, $1.10 **B**=1g, $2.50
C=5g, $5.00

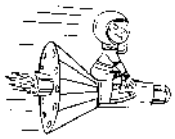
5423SO Northern Sea Oats OG *Chasmanthium latifolium* Perennial, Zones 5-11. We admire its 2' strong arching stems dancing with airy green flattened seedheads. Lovely in arrangements from June to September, after which its bamboo-like foliage changes from green to a rich brown, providing winter contrast. The dried seedheads make interesting accents in handmade paper. Self-sows freely if not deadheaded. Likes moist conditions and is lighter green when grown in full sun. AGRIOR-certified. ~260s/g. ③

A=0.2g, $1.20 **B**=1g, $4.00 **C**=4g, $14.00

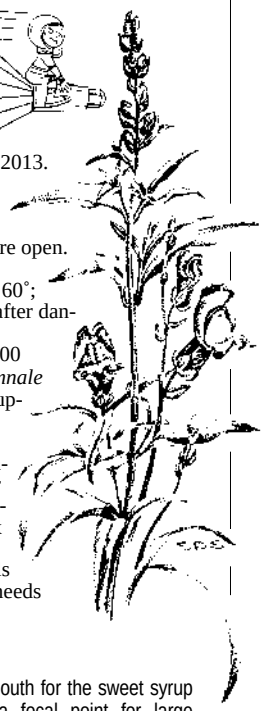


5425SD Alaska Strain Shasta Daisy *Leucanthemum* x *superbum* Perennial, Zones 4-10. The first man-made flower, hybridized by the legendary Luther Burbank. It took him 17 years. His daisy looks good with Gaillardia and Coreopsis. The clean white flowers with bright yellow centers make good cutflowers and border plants for sunny locations. One of the easiest perennials to grow; will usually bloom first year if started indoors in spring and transplanted when soil warms. 3' tall. ~750 seeds/g. ③
A=0.5g, 90¢ **B**=4g, $2.20
C=16g, $5.00

5428CD Crazy Daisy *L.* x *superbum* Perennial, Zones 4-10. We're crazy for this daisy because its quilled petals make it unlike any other in the Shasta class. Almost all of the 2½–3" creamy white blossoms are fully double and reminded us of dahlias. Bloomed the second year for Donna Dyrek starting on July 6 and put on a good show for nearly a month. The later blossoms were less doubled, showing the small yellow centers more. Required no protection to overwinter in Central Maine, but mulching is recommended for cold areas. 24–28" plants like a well-drained location in full sun. Need a cold period and long days to initiate bloom. ~900 seeds/g. ②
A=0.1g, $1.40 **B**=0.3g, $3.00
C=1.2g, $6.00



5431RS Rocket Mix Snapdragon *Antirrhinum majus* (120 days) Perennial in Zone 7-10, grown as an annual, and occasionally overwinters even in central Maine. F-1 hybrid always very popular with commercial growers. We sold 155 B-size and 16 C-size packets in 2013. Its long stems and vibrant colors: pink, red, yellow, orange, white and orchid on 2–3' plants make Rocket the standard snapdragon for cutting. For local production of cuts, harvest when more than half the flowers are open. Will last 5–8 days. Withstands light fall frosts. Sow indoors at 65–75˚. Do not cover the seeds. Grow on at 60˚; warmer temperatures cause leggy transplants. Set out after danger of frost, spacing at 9–12". ~5,000seeds/g. ⑤
A=0.025g, $2.40 **B**=0.125g, $6.20 **C**=0.5g, $21.00



5434SZ Helena Mix Sneezeweed *Helenium autumnale* Perennial, Zones 3-10. Also known as Sunny Bride. Supposedly used for snuff in earlier times, hence its common name. A rich chromatic scale of bronze, brown, crimson and yellow for an end-of-summer display. Single flowers resemble Coreopsis but have a large center "button" like coneflower, and cover the tops of branching upright 4–5' plants. Combine with asters and phlox for great late-season color. Not fussy, easy to grow, excellent for cutting. At its prime when most perennials have finished blooming. Generally a low germinator; needs 2–3 weeks. ~5,000 seeds/g. ③
A=0.05g, $2.50 **B**=0.2g, $9.00

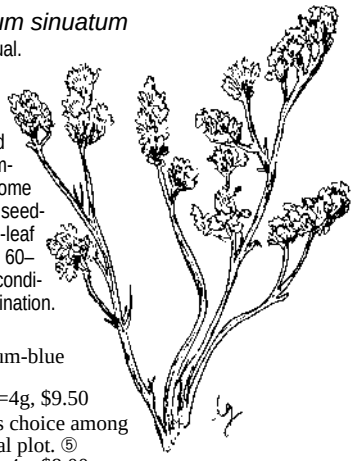
SORGHUM spp.

Annual. Originally from Africa, sorghum is cultured in the South for the sweet syrup of its stalks. In the ornamental trade it is used as a focal point for large arrangements.

5435BS Black Sorghum *S. nigrum* 6–8' plants topped with robust oval black inflorescences. Shorter and earlier than most sorghums, which often reach 12'. Harvesting the heads at the right stage can be tricky; gathered too early they are not dark enough, too late they may discolor or shatter. Heldover seed tests at 92%. ~60 seeds/g. ③
A=1g, $1.10 **B**=4g, $3.00 **C**=12g, $6.00

5437BR Red Broom Corn *S. vulgare* (105 days) Not a true corn, but a sorghum, broom corn looks and grows like corn but develops no ears, instead producing a tall spray of seed heads at the top of the plant in lieu of a tassel. These 2–3' sprays are laden with shiny red ⅛" seeds that birds love. Incorporate seeds into edible bird-feeder wreaths or leave sprays intact to add variety to traditional fall decorations. To make natural straw brooms, comb seeds out of the dry stalks and tie the seedless heads together. Stalks, generally 7–9', will grow up to 10' in an optimal season. ~48 seeds/g. ①
A=4g, $1.20 **B**=12g, $2.80
C=36g, $5.00 **D**=180g, $15.00

STATICE *Limonium sinuatum*



Perennial in Zone 8-9, grown as an annual. Faithful standby in everlasting bouquets; also good in fresh arrangements. Reaches 2–2½' on stiff winged bright green stems. Flowers may be gathered for drying many times throughout summer. Germinates in 5–14 days at 70˚. Some light should reach the seed. Vernalize seedlings at 50–55˚ until they reach the 5-leaf stage, then increase temperatures to 60–70˚. Grow in full sun. Tolerant of dry conditions. Seed is rubbed for easier germination. **~300 seeds/g.**

5444SB Pale Blue Seeker Medium-blue flowers, the best blue in our trial. ③
A=0.2g, $1.50 **B**=1g, $4.00 **C**=4g, $9.50

5449FP Fortress Purple Donna's choice among 23 varieties of statice in her 2009 trial plot. ⑤
A=0.2g, $1.40 **B**=1g, $4.00 **C**=4g, $8.00

5451RC Compindi Rose Rich carmine. The best rose-colored variety, from Benary in Germany. ②
A=0.2g, $1.60 **B**=1g, $5.00 **C**=4g, $12.00

5453QW QIS White Swan Like frilly tutus in the ballet, this double white statice dances circles around all the others—and we've looked at a lot of the others. 2½' stems bear clean white full flowers with no yellowing or browning. A classic. ⑤
A=0.2g, $1.40 **B**=1g, $4.00 **C**=4g, $10.00

5456QY QIS Yellow A new color of this excellent series designed for market growers. Clear yellow prominent flowers on 2½' stems. Bright and beautiful. ⑤
A=0.2g, $1.50 **B**=1g, $4.00 **C**=4g, $10.00

5464MS Mixed Colors (115 days) Mix includes lavender, rose, purple, white. Heldover seed tested at 80%. ②
A=0.4g, $1.10 **B**=2g, $2.80 **C**=6g, $6.00 **D**=30g, $18.00

5466SM Sunset Mix (~115 days) Warm shades of apricot, peach, rosy red, yellow and white; guaranteed to mix and match in arrangements, as filler, or in the garden. The different colors mature at slightly different times. 26" tall. ⑤
A=0.4g, $1.60 **B**=2g, $6.00 **C**=6g, $14.00

5471GS German Statice *Goniolimon tataricum* Perennial, Zones 4-10. Large silvery-white flower heads for drying. Germinates in 12–21 days at 70–72˚, then grow on 4 to 6 weeks at 55–60˚. Set out in early spring using 1–2' spacing, or direct seed early spring or late fall. Likes heat and good drainage. 20". Clean seed. ~1,000 seeds/g. ③
A=0.05g, $1.20 **B**=0.2g, $3.00 **C**=1g, $5.50

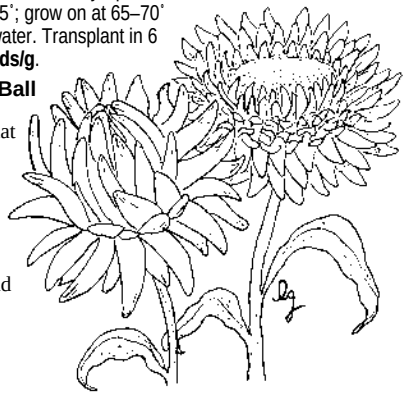
STOCK *Matthiola incana*

Annual. Old-fashioned bedding plant formerly known as Gilliflower, with multiple spikes of usually double flower clusters. Genus is named for Pierandrea Mattioli, a 16th-century Italian botanist, while *incana* means 'hoary' or 'light grey,' referring to its soft grey leaves. Good in beds, borders and containers. Tolerates frost to around 26˚F. For earlier blooms, sow indoors at 60–65˚ 6 to 8 weeks before setting out after danger of frost. Likes moderately fertile moist well-drained soil, full sun. Stocks are Crucifers; for good rotation, don't plant them where you recently had brassicas or follow them with members of that family. **~600 seeds/g.**

5475VM Vintage Mix We're bullish on this fragrant mix of pink, lavender, red, rose, peach, yellow, copper and white bred for larger flowers and early bloom. About half will have fully double blooms. Sturdy well-branched 15–20" plants. ⑤
A=0.1g, $1.90 **B**=0.5g, $6.00 **C**=2g, $12.00

STRAWFLOWER *Helichrysum bracteatum*

Annual. The freeblooming strawflower is good for border color and excellent for drying. Monstrosum varieties grow 30–40" tall, have 2–2½" fully double flowers. Grow in full sun. Gather blossoms before fully opened. Likes warm weather but will bloom into fall. Germinate at 70–75˚; grow on at 65–70˚ days and 60˚ nights. Do not overwater. Transplant in 6 weeks at 12" spacing. **~1,300 seeds/g**.



5483FB Monstrosum Fire Ball Bright red. "Love Fire Ball strawflower. Stunning. Now that we have seen it we can't live without it." ③
A=0.2g, $1.10
B=1g, $2.80
C=5g, $5.00

5488MX Monstrosum Mix Hot pink, light pink, white, gold and deep rose. ③
A=0.33g, $1.00
B=7g, $2.50
C=28g, $5.50

SUNFLOWER

Helianthus annuus

Annual. Sunflower remains have been found in the Tabasco region of Mexico dating from 4100 BCE. Prized for their seeds by humans and birds, and for cutflowers by market growers, sunflowers also add a lighthearted touch to gardens.

Easy to grow. Start indoors 3–4 weeks before last frost at temperatures of 65–75˚ or direct sow after frost, 3 to a pocket. Thin to best plant, 1' or more apart. Rich friable soil yields tallest plants; drought stunts growth. Will readily self-sow; for some fun leave a few volunteers in strategic locations.

For cutflowers harvest when the flowers are almost completely open. Although flower arrangers often eschew sunnies with pollen, Eliza Lindsay of Portland, OR, expresses a different point of view: "Sunflowers that produce pollen are my favorite. They feed the bees first and later the birds." All varieties have pollen unless noted otherwise.

How much sunflower seed does Fedco sell in a year? About 12,500 packets for 220 lb.

Varieties open-pollinated unless otherwise indicated.

See also #**5906** Hopi Dye; and #**8191** Oilseed Sunflower in the OGS section.

5500AO Autumn Beauty Mix OG (70-90 days) Our second-best-selling flower variety, a 6–8' multibranching beauty. Produces a lovely mixture of earthen shades, petal colors ranging from bright yellow to bronze and purples. Most have a characteristic red ring enclosing a black center. Blossoms 4–6" across are perfect as the center of giant flower arrangements. According to *The Avant Gardener*, "still reigns supreme as the most desirable multiflowered ever-blooming mixture." CCOF-certified. ~45 seeds/g.③
A=1g, $1.00 **B**=4g, $2.40 **C**=28g, $6.00 **D**=1lb, $50.00

5503FT Fantasia F-1 hybrid. Stately 4–5' stalks bearing 4–8" perfectly round pollen-free flowers. The best of 16 varieties in my grow-out. I noted a perfect blossom that opened with the month of September and was most gorgeous on Sept. 8. It was 5" across, yellow-orange with a striking dark brown center. Fantasia is a formula blend with colors ranging from white to darkest red, with double and semi-double flowers. Let the lights dim and the fantasy begin. ~22 seeds/g. ③
A=0.5g, $1.20 **B**=2g, $4.00 **C**=10g, $10.00 **D**=40g, $30.00

5507FL Florenza Attracted many comments in past sunflower trials at Common Ground Fair. Stunning brown-centered 6" flowers in maroonish red with yellow tips and a hint of yellow around the center. Mixes well with other sunflowers; makes the whole bouquet "pop." 3½' tall. ~40 seeds/g. ②
A=0.5g, $1.40 **B**=2g, $4.00 **C**=8g, $9.00 **D**=24g, $19.00

5509GH Green Heart F-1 hybrid. Stole the show and stole my heart with its bold display in my back bed in Colrain, MA. Had I planted them close to the road the golden-yellow blooms with their amazing 4" lime-green centers would have literally stopped traffic. These make compelling cutflowers and are pollen-free. Tall straight single stems grow up to 5'. ~15 seeds/g. ③
A=0.6g, $2.00 **B**=2.4g, $6.20 **C**=12g, $16.00 **D**=36g, $42.00

5512JK The Joker (60 days) F-1 hybrid. If your sunflowers need a New Deal, start with a new deck by adding this Joker, a bicolored pollenless beauty with two rings of petals. An interior short yellow fringe resembling eyelashes radiates from the brown disk and accentuates the big orangy-maroon yellow-tipped outer petals. Rated among the best sunflowers for cutting by horticulturalists at the University of Florida. Mottled red stalks grow 5–7' with multiple branching. ~22 seeds/g. ③
A=0.5g, $1.30 **B**=2g, $3.50
C=6g, $7.50 **D**=1oz, $20.00

5515LO Lemon Queen OG Luxuriant 8" blooms with lemon-yellow petals surrounding striking solid brown centers. Although it can grow up to 10' tall in rich soil, its powerful stems do not lodge. Likes high fertility; makes shorter stems and narrower petals in average soil. Not early; bloomed for Donna Dyrek in late August. MOSA-certified. ~45 seeds/g. ②
A=1g, $1.00 **B**=5g, $2.50 **C**=20g, $5.50 **D**=1lb, $54.00

5518GS Mammoth Grey Stripe (120 days) A traditional variety of giant (usually 6–12') single-stem sunflower with large seed heads. The one to grow if you want to eat the seeds. Beloved by birds and kids. "Absolutely stunning and the tallest sunflower I have ever grown—at least 14' tall," reported Sharon Miller of Vorheesville, NY. ~9 seeds/g. ②
A=14g, $1.30 **B**=56g, $3.30 **C**=224g, $10.00 **D**=896g, $28.00

5521MR Moulin Rouge (65 days) A favorite among commercial growers for its color, though not all stems are long enough for cutting. 5–6' multibranching stems topped by gorgeous 5–7" dark-red pollen-free blossoms, somewhat short-lived. Burgundy petals become almost black close to the disc. The Moulin Rouge was a nightclub in Paris where Toulouse-Lautrec created much of his work, using red-headed beauties as models. This sunflower would make a fine subject for such an exuberant artist. ~22 seeds/g. ③
A=0.5g, $1.40 **B**=2g, $4.00 **C**=10g, $10.00 **D**=40g, $30.00

Pro-Cut Lemon (55 days) *Not available this season.*

5533RE Ruby Eclipse (55 days) F-1 hybrid. We don't know if the ruby-red petals with lemon tips will eclipse all others, but they are a vivid addition to any collection of sunflowers. The gorgeous pollen-free 4–5" flowers with dark centers sometimes shade into pink. 6' branching plants. ~25 seeds/g. ③
A=0.5g, $1.30 **B**=2g, $3.20 **C**=10g, $10.00

5536SG Schnittgold Handsome single-headed 5' sunflower. Its double ring surrounded by deep yellow petals makes a striking display. The center pollen ring is black and flat, surrounded by an auxiliary ring of brown. *Schnitt* means 'cut' in German; with 8–10" blooms, this variety makes a superb cutflower. Karen Pratt points out that Schnittgolds, when mature, get a hollow in the center—perfect for making the sunflower bird wreaths sold in pricey garden catalogs. ~25 seeds/g. ②
A=1g, $1.20 **B**=3g, $2.50 **C**=12g, $6.00 **D**=60g, $22.00

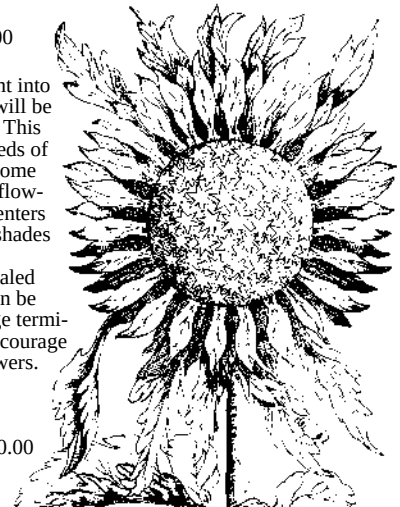
5539SO Selma Suns Mix OG Trialer Donna Dyrek rates these her favorite sunflowers for their fragrance, beautiful diversity and plethora of polyheading 6" blooms. Selma's heads have small dark centers, pointed petals, and display various hues and shades including yellows, golds, maroons and reds. Dyrek reports that Selma "flowers forever if the squirrels don't rip off the heads." 6–7' tall. MOFGA-certified. ~55 seeds/g. ①
A=1g, $1.20 **B**=3g, $2.50 **C**=12g, $6.00 **D**=60g, $22.00

5542SO Soraya OG (80 days) The first sunflower ever to win an AAS (2000), Soraya impressed the judges with its luminescent deep orange petals, contrasting dark mahogany center disks, and sturdy branching habit. The latter accounts for its astonishing productivity, up to 25 4–6" blooms per plant, borne on stout 20" stems, perfect for cutting. Almost pollenless. 6' plant spreads 2–3'. *Short crop*; get 'em while you can. MOFGA-certified. ~60 seeds/g. ①
A=0.5g, $1.80 **B**=4g, $7.00

5545SM Summer Sensation (65 days) Vibrant 8" flowers, yellow surrounding a dark disk, on 5' plants. Can be grown as a single stem or pinched to branch out. Seedhead can be crafted into those decorative natural bird-feeders—if you don't snack on the seeds first. ~10 seeds/g. ③
A=2g, $1.20 **B**=6g, $2.80 **C**=30g, $8.00 **D**=1lb, $96.00

5548SD Sungold Dwarf (60 days) Danish variety much nicer than the original Teddy Bear or any of its imitators. Fully double polyheaded blooms growing on very short stems—the main stalk is only 2'—give the fuzzy effect. Habit almost like a well-behaved dahlia. Drew much attention and many comments at our sunflower display at Common Ground Fair. Blooms hold well compared to other dwarf types. *May contain some taller off-types.* ~50 seeds/g. ③
A=1g, $1.00 **B**=3g, $2.50
C=12g, $5.50 **D**=60g, $20.00

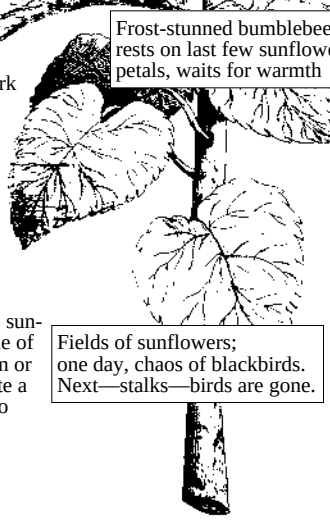
5551TO Tiger's Eye OG (85-100 days) If you look straight into the center of the seedhead, you will be looking into the eye of the tiger. This mix, originally developed by Seeds of Change a decade ago, includes some fascinating combinations. Most flowers have double-petaled fluffy centers with single outer rays in sunset shades of gold to bronze to copper and maroon, but a few are single-petaled gloriosa types. The 6–8' plant can be grown as a single stalk for a large terminal flower or pinched back to encourage up to 30 branches with 4–8" flowers. OT-certified. ~20 seeds/g. ④
A=1g, $1.20 **B**=4g, $3.20
C=20g, $8.00 **D**=100g, $30.00



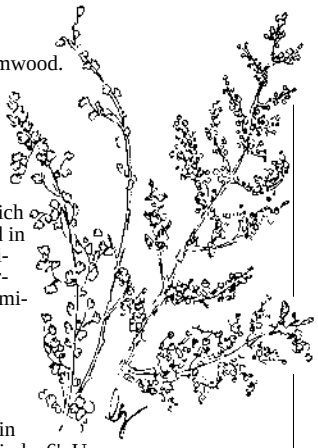
Frost-stunned bumblebee rests on last few sunflower petals, waits for warmth

5555VI Vanilla Ice *H. debilis* The closest we have seen to a white-petaled sunflower. Though their true color is more cream or pale yellow, the petals make a great contrast to the rich dark disk in the center. Superior to the better-known Italian White in our trial. Wini Noyes advises to "start really, really early and don't transplant until they are very strong." Polyheaded with 5' stalks, 3–4" blossoms. ~225 seeds/g. ③
A=1g, $1.30 **B**=3g, $3.20
C=12g, $6.50 **D**=60g, $22.00

5599SS Sunflower Sampler For those who wish to get in on the sunflower craze without spending a pile of jing, we'll mix seed for a half dozen or so varieties into one package. Create a lovely display for a dollar thirty. No dwarfs or mammoths. ③
A=1g, $1.30 **B**=3g, $3.20
C=9g, $6.40 **D**=90g, $32.00



Fields of sunflowers;
one day, chaos of blackbirds.
Next—stalks—birds are gone.



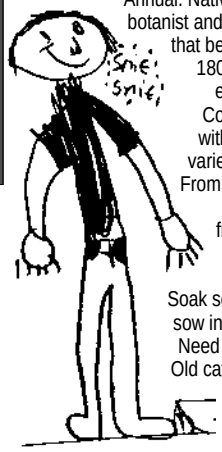
5603AO Sweet Annie OG *Artemisia annua* (120 days) Annual. Also known as Sweet Wormwood. The scent of Common Ground Fair. We associate its pungent fragrance with the Fair where so many vendors offer it and where we sell more seed than for any other item. John Pino has brought it to the Fair Farmers' Market by the trailerload. Annie grows up to 5', with light green leaves valued for everlasting wreaths which emit their distinctive redolence all winter. Used in China, where it's known as *qing hao*, as an antimalarial and antimicrobial. Reseeds itself vigorously. Seed must be frozen for 2 days, then germinated in light. WA-certified. ~250 seeds/g. ①

A=0.2g, $1.20 **B**=0.6g, $3.00
C=4.8g, $7.00 **D**=24g, $30.00

5611PP Perennial Sweet Pea *Lathyrus latifolius* Zones 3-10. The traditional English cottage sweet pea, grown by Jefferson in 1771, thrives in cool climates, loves sun and climbs 6'. Useful as a screen. Comes in shades of rose, white and pink in big clusters. Good cutflowers. Soak seeds up to 24 hours before sowing outdoors in early spring. Can take 3–4 weeks to germinate. ~20 seeds/g. ②

A=1g, $1.20 **B**=3g, $2.50 **C**=12g, $5.50

SWEET PEA *Lathyrus odoratus*



Annual. Native to Sicily, first domesticated around 1699 when amateur botanist and monk Father Francis Cupani shipped seed for the variety that bears his name to a hothouse grower in England. In the late 1800s extensive breeding work, especially by Henry Eckford, expanded the range of available colors. Around 1900 Silas Cole, gardener to Earl and Countess Spencer, found a sport with much larger ruffled flowers but less scent than Eckford's varieties. It created a sensation when it was exhibited in 1901. From this variation derive all modern strains including Spencer, Cuthbertson, Knee-High and Mammoth. As interest in fragrance revived, Bodger Seeds Ltd. obtained as many of the pre-Spencer varieties as possible and created Old Spice Mix in the 1970s.

Soak seeds for 12–24 hours prior to sowing. For earliest blooms, sow indoors 2 months before setting out, or sow direct in spring. Need darkness for germination, which takes 10–21 days at 60˚. Old catalogs recommended sowing in a 4–5" trench and filling in as the peas grew. To reduce root fungal diseases always select well-drained locations and rotate them from year to year. Likes full sun and moist rich soil, but many perform poorly in heat, so mulching is recommended. If you are growing for cuts, avoid windy locations, as exposure will make plants stockier and stems shorter. Requires support. We use #**9071** Trellis Plus. Harvest flowers frequently to keep blooms coming. Last only 3 days in the vase, but perfume the air incomparably. Give your love a bouquet of these! **~12 seeds/g.**

Perennial sweet pea is above.

5614AM America An antique striated variety, arresting both to eyes and nostrils. Each blossom contains subtle variations of bright reds with creamy white streakings. Heavily perfumed. Looks lovely next to Cupani. First offered in 1896 by Morse-Vaughan. Vines grow to 3'. ③

A=2g, $1.10 **B**=8g, $2.80 **C**=24g, $6.50 **D**=120g, $28.00

5620BK Black Knight One of 115 varieties Eckford exhibited at the Crystal Palace in 1900, bred in 1898. Highly scented deep maroon flowers tolerant of heat. 5–6' vines. ③

A=2g, $1.20 **B**=8g, $3.00 **C**=24g, $7.00 **D**=120g, $30.00

5623CU Cupani Oldest and among the most fragrant of all sweet peas. Celebrated its 300th birthday in 1998 amidst a surge of renewed interest. Named for the Sicilian monk who found these bicolors growing wild, Cupani combines deep maroon-purple upper petals with deep violet-blue lower petals. Grow Cupani for enticing intoxicating aroma. 5' vines. ③

A=2g, $1.10 **B**=8g, $2.80 **C**=24g, $6.50 **D**=120g, $30.00

5626KH Knee-High Mix Semi-dwarf 20" bush-type plants need no support, produce full-length stems. ②

A=7g, $1.30 **B**=28g, $4.00 **C**=84g, $9.00 **D**=1lb, $45.00

5629MM Mammoth Mix (75 days) 4–6' staking variety. The best tall mix in our many gorgeous trials. Though temporarily slowed by heat waves, revives during each cool spell and never stops blooming from July to September. Long stems make ideal cutflowers. Mixture of crimson, scarlet, white, lavender, deep rose, medium blue and pink. The purples and reds are the most fragrant. Year after year the least finicky and most dependable performers in heat. ③

A=7g, $1.50 **B**=21g, $3.50 **C**=63g, $8.00 **D**=1lb, $46.00

5632MC Mrs. Collier A white sweet pea with real fragrance! We thank Marilyn Barlow of Select Seeds in Union, CT, for bringing it to our attention. Even in the hot humid nights of August, 2010, the heavenly blooms lasted and exuded way more scent than the whites in the Mammoth mix. Introduced in 1907 by Dobbie & Company. 5–6' vines. ③

A=2g, $1.20 **B**=8g, $3.00 **C**=24g, $7.00 **D**=4oz, $20.00

5635MS Streamers Mix (60 days) Relentless, our sweet pea trialer, is passionate about the genus: he grows them, he trials them, he breeds them. So, when a sweet pea stands out for him, it really stands out. At over 5' tall with abundant fragrance, these Streamers really rocked. Known in the trade as "flakes" for the boldly streaked white patterns rippling on a mix of colors—blue, lavender, pink, purple, chocolate, orange and scarlet. Along with its good stems, huge blossoms and excellent longevity as a cut flower, they make this 2002 introduction a real coup for pre-eminent New Zealand breeder Keith Hammett. ③

A=2g, $1.40 **B**=8g, $3.60 **C**=24g, $8.50 **D**=4oz, $30.00

5643CT Creeping Thyme *Thymus serpyllum* Perennial, Zones 3-10. Also known as Mother-of-Thyme or Brotherwort. Creeping sweet-scented ground cover with purple flowers good in rock gardens, between stepping stones or on dry slopes. Likes good drainage, full sun and alkaline soil. Plants grow slowly from seed, may be started indoors two months before planting, or outside in early spring or fall. Sow thickly, do not cover seeds. 2". ~6,290 seeds/g. ③

A=0.1g, $1.10 **B**=1g, $2.80 **C**=3g, $5.00 **D**=30g, $32.00

TITHONIA *T. rotundifolia*

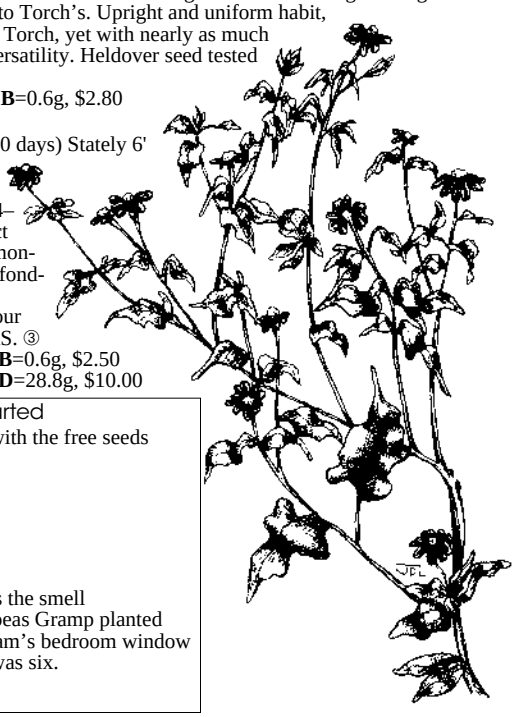
Annual. Also known as Mexican Sunflower. Attract butterflies with these tall floriferous beauties. The dressy blooms often exceed 4" across and continue over a long season. Heat-loving plant closely related to the zinnia. Sow outdoors after danger of frost in 70–85˚ soil, or start indoors 6 weeks before last frost date. Tithonia sulks in the cold so don't bring it out too soon. **~100 seeds/g.**

5647GF Goldfinger Bond with Goldfinger! 4' tall with bright orange 3–4" blooms comparable to Torch's. Upright and uniform habit, but more dwarf than Torch, yet with nearly as much charm and greater versatility. Heldover seed tested at 80%. ③

A=0.2g, $1.10 **B**=0.6g, $2.80
C=1.8g, $5.00

5649TH Torch (120 days) Stately 6' plants with velvety dark green leaves bear scarlet-orange 4–5" blooms that attract hummingbirds and monarch butterflies. My fondness for this showy flower is shared by our customers. 1951 AAS. ③

A=0.2g, $1.10 **B**=0.6g, $2.50
C=7.2g, $5.00 **D**=28.8g, $10.00



When the Garden Started

For me, I think it started with the free seeds
End of school
Fourth grade
And a few weeks later
Radishes
Then lettuce
Then peas.

Or maybe it was the smell
of the sweet peas Gramp planted
outside Gram's bedroom window
when I was six.

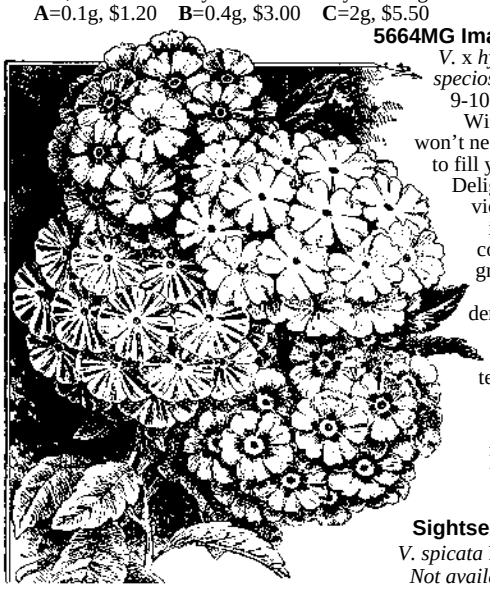
Or something good to eat.

5657VH Southern Charm Verbascum *V.* x *hybrida* Perennial, Zones 5-9. F-1 hybrid. These dramatic plants, related to mullein, have become very trendy. Strong 2–3' stalks generate gorgeous two-tone 1½" blossoms in marvelous pastel combinations of peachy rose, creamy gold and lavender, each with a fuzzy rosy-purple center. Multiple stalks on each plant are covered with short-lived flower pairs that open successively from bottom to top and make an extended show. Some rebloom in September, especially if you cut the spent flower stalks. Takes 2–3 weeks to germinate, blooms the first year. Set out 1' apart in full sun, well-drained soil. ~1,000 seeds/g. Pelleted seed sold by count. ⑤

A=20 seeds, $2.70 **B**=100 seeds, $12.00 **C**=300 seeds, $35.00

5661PV Purple Top Verbena *V. bonariensis* (90 days) Perennial in Zone 7-10, grown as an annual. I fell in love with this free-flowering verbena at first glance. Don't confuse it with the hybrid dwarf bedding plant. Proud strong 3–4' stems almost without leaves topped with vibrant purple flowers that thrive in heat and bloom from July to October. Makes an ideal cutflower and mingles beautifully with other tall border plants. Hillary Nelson suggests combining with cosmos, lavender, purple zinnias and lemon mint. Attracts butterflies. Extremely drought-resistant. Erratic germination may be helped by 3–5 weeks' stratification prior to sowing. Start at temperatures of 70–75˚, grow on at 55–62˚. Keep growing medium fairly dry. Cutflower customers love it, but its tendency to shatter annoys some growers. ~4,000 seeds/g. ③

A=0.1g, $1.20 **B**=0.4g, $3.00 **C**=2g, $5.50

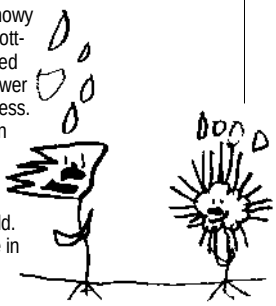


5664MG Imagination Verbena *V.* x *hybrida* (also called *V. speciosa*) Perennial in Zone 9-10, grown as an annual. With its 20" spread, you won't need much Imagination to fill your hanging baskets. Delightfully intense blue-violet flowers create an increasing cascade of color. Makes a 12" tall ground cover, ideal for flower beds or borders. Stems creep along the ground and take root. Soft fine-textured foliage. Likes full sun and tolerates drought. ~900s/g. ②

A=0.1g, $1.90
B=0.3g, $4.50
C=1.5g, $15.00

Sightseeing Mix Veronica *V. spicata* Perennial, Zones 3-8. *Not available in 2014.*

ZINNIA *Z. elegans*



Annual. Known as Youth and Old Age in the 1800s, this showy genus was named for German botany professor Johann Gottfried Zinn (1727-1759). One of the easiest to grow from seed and a favorite for bright color in Maine summers. Zinnia flower essence is used to bring out playfulness and lightheartedness. Cut when flowers are almost fully mature, just before pollen starts to form. Deadhead to continue production. Sow in a sunny spot after last frost, or start indoors for earlier blooms. They need good drainage and like heat. Jason Kafka says zinnias perform better in tunnels than in the field. With the extra heat they get so big that "they think they are in New Jersey."

Germinates 3–5 days at 80–85˚, more slowly at cooler temperatures. Grow on at 70˚ days, 60–65˚ at night. Temperatures below 60˚ delay flowering and may induce chlorosis. Space at 9–12". **~110 seeds/g except where noted.**

Benary's Giants (85 days) A most elegant giant dahlia-flowered zinnia. The densely petaled double flowers regularly exceed 4" across, showy yet extremely refined, borne on long stems perfect for cutting. Highlighted by the uniform petal patterns, colors are particularly bright. Holds better than most even under the stress of high heat and rainfall. Absolutely breathtaking in ideal conditions. 3–3½' plants. The zinnia of choice for market growers; on a par with State Fair Mix for home gardeners. Only film-coated polished seed is available. ~120 seeds per gram.

5700BL Benary's Giants Lime A trendy color in this superior series. Coated ②

A=0.2g, $1.90 **B**=1g, $4.80 **C**=4g, $16.00

5702SP Benary's Giants Scarlet Coated. ②

A=0.2g, $1.90 **B**=1g, $4.80 **C**=4g, $16.00

5704BW Benary's Giants Wine A very hot fuchsia. Coated. ②

A=0.2g, $1.90 **B**=1g, $4.80 **C**=4g, $16.00

5707MP Benary's Giants Mix From yellow, orange and white to scarlet, rose-pink, coral, deep red, lilac and purple. Coated. ②

A=0.2g, $1.90 **B**=1g, $4.80 **C**=4g, $16.00

5711CJ Cactus Bright Jewel Mix (75 days) Large ruffled zinnia blossoms resemble chrysanthemums. Profuse immense blooms in scarlet, orange, pink, yellow. 3' tall. ③

A=1g, $1.00 **B**=7g, $2.50 **C**=28g, $6.00 **D**=4oz, $15.00

5714GM Gold Medal Mix A formula blend of cherry, orange, pink, purple, scarlet, white and yellow dahlia-flowered blossoms 4–5" across excellent for cutting. Flowers are flat-petaled, semi-double on 3½' plants. Bred by Bodger. ③

A=1g, $1.00 **B**=7g, $2.50 **C**=28g, $6.00 **D**=4oz, $15.00

5717NC Inca Waist-high stems bear incredible 3–4" single blaze-orange blooms with showy little yellow doodads (disk florets) in the center. Long stems for cutting. Flowered fluorescently from July to October at Donna Dyrek's 2008 trial. Spectacular! ~120 seeds/g. ③

A=0.5g, $1.30 **B**=1.5g, $2.50 **C**=9g, $7.50

5719KY Oklahoma Golden Yellow Bred specifically for cutflower growers, the Oklahoma series offers a less expensive alternative to Benary's Giants. The Oklahomas are as floriferous as Benary's with smaller 2" blossoms and comparable stem length. They bloomed for Donna Dyrek on July 2, four days before the Benary's. The 30–40" plants are taller and slightly more frost hardy. The elegant pompon blooms are slow to show cold stress or go single. All seed held over; germinates at 88%. 160 seeds/g. ②

A=0.5g, $1.30 **B**=2g, $4.00 **C**=8g, $10.00

5725PM Pumila Mix (Cut & Come Again) Small 2' plants with flowers 2½–3" across. Wide range of colors includes orange, yellow, white, pink, lavender and scarlet. ~175 seeds/g.③

A=1g, $1.00 **B**=7g, $2.50 **C**=28g, $6.00 **D**=4oz, $12.50

5728FL Scarlet Flame Even Gene, who doesn't like gaudy zinnias, was attracted to Scarlet Flame's elegant bright scarlet blooms. 3' stems. Predates 1934. ③

A=1g, $1.10 **B**=7g, $2.80 **C**=28g, $9.00 **D**=4oz, $25.00

5731SF State Fair Mix (90 days) Old-fashioned variety bears a rich array of huge single and double blooms on 30" plants. The blooms are much showier than those in the Gold Medal Mix with fully saturated colors that include red, magenta, purple, orange, lavender and pink. Our best-selling zinnia ranks third among all flowers. ~80 seeds/g. ②③

A=0.5g, $1.10 **B**=2g, $2.80 **C**=12g, $6.50 **D**=4oz, $24.00

5734SW Swirls (85 days) These zinnias wowed everyone who saw them in our trials with their slightly fluorescent bicolor blooms of rose and white or red and yellow. The 4" flowers are fully double to semi-double with slightly ruffled flat petals borne on 2' stems. ~190 seeds/g. ③

A=1g, $1.10 **B**=7g, $2.80 **C**=28g, $7.00 **D**=4oz, $20.00

5738ZF Zowie!™ Yellow Flame (85 days) My favorite flower variety in 2010, nothing is staid about this 2006 AAS winner. Color pops right out of 3–4" semi-double blooms with glowing magenta centers and rose petals dipped in yellow at the tips. At 2–3' the well-branched plants are loaded with flowers of remarkable staying power. Whatever our tough climate dishes out, whether cold rain or steamy heat, the blooms stay clean and seem to last forever. Superb for bouquets too, with a vase life of up to 2 weeks. ~125 seeds/g. ⑤

A=0.1g, $2.80 **B**=0.4g, $10.00 **C**=2g, $39.00

5748JM Jazzy Mix *Z. haageana* If you thought the smaller Mexican-style *haageana* zinnias were always more subdued than their gaudier *elegans* cousins, guess again. This mix will jazz up your patch with an array of pink, orange, carmine and burgundy-red blooms tipped yellow to carmine that put our old Persian Carpet to shame. Masses of sparkling semi-doubled 1½" blossoms, some with a pompon effect, on slender stems cloaked in clean bright green leaves. ~690 seeds/g. ⑤

A=0.1g, $1.30
B=0.4g, $2.60
C=2g, $10.00
D=10g, $36.00

MIXES *Confundium fedcoensis*

5804BM Beneficials Mix Frank Morton teaches that "when you increase the diversity of an ecosystem you enhance its ability to maintain itself and to resist perturbation." One way to increase the diversity of an ecosystem is to sow this mix of annuals, biennials and perennials that will attract and maintain a diverse population of beneficial insects to help manage pests in the garden. Instead of resorting to toxic sprays, attract hover flies, ladybugs, lacewings, parasitic wasps, tachnids, spiders, minute pirate bugs, damsel flies and big-eyed bugs and let them devour the "bad" bugs! Something in the mix will be blooming from spring through fall. Comprised of alyssum, bachelor's button, borage, gem marigold, dill, fennel, *Phacelia tanacetifolia* or fiddleneck, caraway, parsley, golden marguerite, ajuga, basket of gold alyssum, and Rocky Mountain penstemon. Should any variety become unavailable we will substitute one with similar efficacy. Sow in spring as a hedgerow in a well-prepared weed-free seedbed close to the garden in full sun. ②③

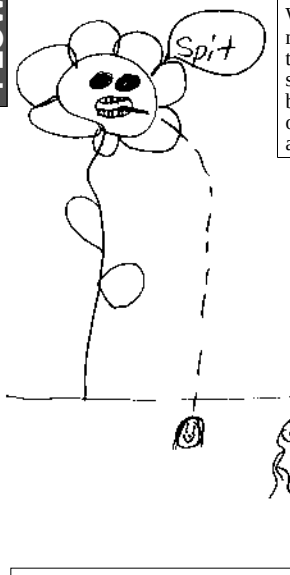
A=1.4g, $1.90 **B**=7g, $7.50 **C**=28g, $22.00 **D**=112g, $75.00

5807CT Cutflower Mix A mixture of annual flowers that can be used for cutting. Includes popular types such as aster, bachelor's button, calendula; also some lesser-known kinds.

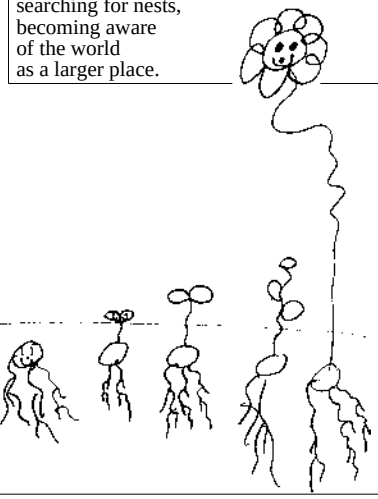
A=1g, $1.10 **B**=14g, $3.20 **C**=56g, $10.00 **D**=224g, $32.00

5809WF Wildflower Mix for the Northeast. A blend of 19 perennial and self-sowing annual species native to or naturalized in northeast U.S. and Canada. Includes black-eyed Susan, New England aster, gayfeather, sweet william, shasta daisy, bachelor's button, echinacea and scarlet flax. Broadcast in spring or fall in a well-prepared weed-free seedbed in a sunny spot. Seed at a rate of 1 lb/4500 sq ft. ~2,143 seeds/g. ②③

A=1.4g, $1.00 **B**=7g, $2.50 **C**=28g, $6.00 **D**=1lb, $38.00



Spring, 1964
Walking back and forth to school, second grade,
my head was always tipped back
to watch orioles fly from elm to elm high overhead,
searching for nests,
becoming aware
of the world
as a larger place.



Seed Longevity for Herbs and Flowers

This information was hard to find. We have integrated results from several tables with our own first-hand knowledge drawn from testing old lots for germination. Seeds stored in less than ideal conditions will have shorter life spans. Plant name is followed by years.

achillea	2	dahlia	2	oregano	2
acroclinium	3	delphinium	1	pansy	2
alyssum	3	dianthus	3	penstemon	2
amaranth	3-5	didiscus	3	petunia (unpelleted)	5
anise	3	digitalis	2	phlox	1
aster	1	dill	3	poppy	3
baby's breath	2	fennel	3	portulaca	3
bachelor's button	3	four o'clock	2	rue	2
basil	5+	gaillardia	2	sage	3
borage	5+	hollyhock	3	salpiglossis	3-5
calendula	3	honesty	2	salvia	1
campanula	3	impatiens	2	savory	3
candytuft	2	larkspur	1	scabiosa	3
caraway	3	lavatera	3-5	snapdragon	3
catnip	5	lavender	5	statice	2
celosia	3-5	lemon balm	5	stock	3
chinese lantern	1	lobelia	3	strawflower	2
chives	1	lupine	2	sweet pea	3
chrysanthemum	3	marigold	3	sunflower	3
cilantro	5+	marjoram	3	thyme	3
clarkia	2	nasturtium	3-5	tithonia	2
columbine	2	nicotiana	3	zinnia	3-5
coreopsis	2	nigella	1		

LIVE FREE OR DYE!

Susanne Grosjean, of the Wednesday Spinners group in Downeast Maine, says, "You need only three dye plants: indigo for blue, madder for red and weld for yellow. Three primary colors, all excellent fast dye plants."

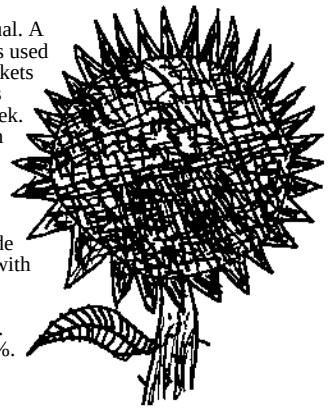
5902DB Dyer's Broom *Genista tinctoria* A tough naturalized perennial, Zones 2-8, originally used to make brooms but mostly valued for its profuse golden-yellow flowering tops that yield a wash- and light-fast clear yellow dye. Branching near the ground, its erect 3' stems may be harvested throughout its flowering period from midsummer to fall and dried for later use. It also has medicinal uses. Plant in full sun where it will not need to be moved as it does not transplant well. Scarify and soak the seeds to cut germination time to 2–3 weeks. Grows slowly the first year and flowers in year two. ~320 seeds/g. ②

A=0.2g, $1.60 **B**=0.6g, $3.00 **C**=3g, $8.00

5904CS Dyer's Coreopsis Mix *Coreopsis tinctoria* Annual. A beautiful native ornamental that provides a full palette of color from yellows and greens to rusts and browns—and even black, depending on the combination of plant parts and mordants. Large cosmos-like flowers in combinations of yellow, mahogany and red atop 2½' erect stems flourish in full sun and make excellent cuts. Low-maintenance and rugged. Good for less cultivated areas such as open spaces, roadsides and borders, competes well with grasses and reseeds easily. Tolerates drought. ~2,200 seeds/g. ③

A=0.3g, $1.00 **B**=0.9g, $2.50 **C**=4.5g, $5.00

5906HO Hopi Dye Sunflower OG (90-100 days) *Helianthus annuus* Annual. A rare indigenous heirloom that the Hopis used as a natural dye source for coloring baskets purplish charcoal. "Blackest little seeds I've ever seen," says trialer Donna Dyrek. They will stain your hands purple when you collect them. Also edible and extremely easy to hull. 8' stalks with massive 12–18" main heads feature golden-yellow single petals around a dark purple-green center. Numerous side branches set all the way to the ground with smaller blossoms that make great cuts. Mound the soil around the base of the plants to prevent lodging. No new crop. Seed in very short supply; germs at 75%. *Order early.* OT-certified. ①



A=1g, $1.80

5911ND Indigo *Polygonum tinctorium* Japanese indigo preferred by dyers in Maine. A tender annual, indigo thrives in fertile soil and likes heat and humidity. Best started indoors 6–8 weeks before the last frost, transplanted out on 1' centers and kept moist. When the plants have grown 1–2' tall and bruised leaves turn navy blue, they are ready for a first harvest. If you cut the stems several nodes up from the ground, they will re-sprout and you can harvest the re-growth, perhaps several times more. Plan ahead and prepare the dye bath the same day as the harvest. ~250 seeds/g. ②

A=0.1g, $2.30 **B**=0.3g, $6.50 **C**=1.2g, $20.00 **D**=4.8g, $70.00

5913MD Madder *Rubia tinctorum* Known as Common Dyer's Madder. Perennial to Zone 5 if mulched heavily. An ancient and excellent source of red dye, native to southern Europe and Asia, the 4' plants have square stems, whorled leaves and pencil-slender roots. Roots go down 2'. Do not harvest them for three years. Then dig deep to get the tap roots, not the runner roots, and grind them to yield a wash- and light-fast red dye *par excellence*. Seed can take two weeks to germinate. Start inside in April in 70+° temperatures and transplant 12–18" apart in loose soil after danger of frost. Mulch deeply and keep beds well weeded. Plants send out runners that could become invasive so dig out the runners periodically or keep the area around the beds mowed. ~45s/g. ①

A=0.25g, $2.30 **B**=1g, $9.00 **C**=4g, $32.00

5928WD Weld *Reseda luteola* Known as Dyer's Rocket. Biennial. Used since antiquity, weld is said to be the best natural source of deep yellow dye, both wash-fast and light-fast. Leaves, flowers and seed capsules have the most color. When overdyed with woad, weld makes Lincoln Green, said to be the method Robin Hood and his band used for their characteristic gang color. A 4–5' member of mignonette's genus, it thrives in well-drained moderately fertile preferably alkaline soil. Attractive to bees. ~4,760/g. ②

A=0.2g, $1.30 **B**=1g, $3.00 **C**=4g, $7.50

We know you love bargains and we hate to disappoint you. We're likely to run out of many of these discounted specials during our late January rush. Please order early.

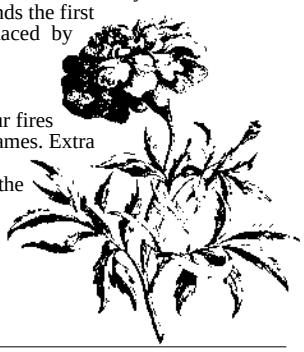
6003LM Little Marvel Pea *Pisum sativum* (63 days) 1934 AAS. Old-fashioned home-garden favorite bears tightly packed cylindrical pods on 2' vines. Very sweet. Surprising yields for such a dwarf plant. Our lot grow-out had many off-types, so no new crop until we can find truer seed. On special to move 'em out. Rogue out the bad guys, enjoy the rest! 60 lb of seed remain at 93% germ. ③
A=2oz, $1.00 **B**=8oz, $3.00

6009PP Plum Purple Radish *Raphanus sativus* (26 days) A popular plum-colored round root. Crisp white flesh has a good sweet taste with only a little heat. Showed significant variation in shape in our lot grow-out. Reduced for clearance and not returning until we can find a more uniform strain. ②
A=1/8oz, 70¢ **B**=1/2oz, $1.40 **C**=1oz, $2.00 **D**=4oz, $5.00

6011CO Speckled Friz Chickendive OG (70-90 days) *Cichorium intybus* x *C. endivia* Morton crossed Wild Garden Chicories with frisée, curly endive and escarole to develop this colorful flock of individuals, more tender than chicory, more cold hardy and ornamental than endive. A variable gene pool with some plants open, others semi-headed, others with full heads. Enjoy a broad range of textures and flavors spiked with a peppery hot tang. Sow in mid-late summer for autumn and winter production. Space 1' apart in rows 1–2' apart. No new crop. About 60 packets available at 78% germ. OT-certified. ①
A=1/16oz, $2.00

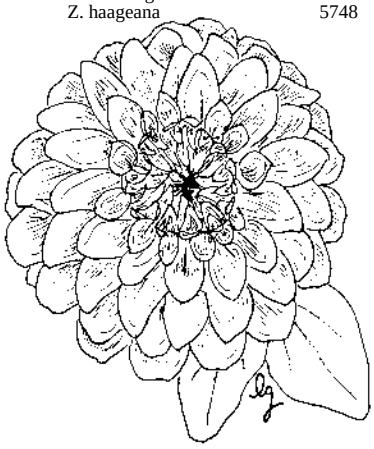
6013SP Sensation Purity Cosmos *C. bipinnatus* White blooms are sparse in the Sensation mix. Purity is for those who want white cosmos. Withstands the first mild frosts of fall. 4–5'. Replaced by Psyche White. ③
A=0.5g, $1.00

6017AF Aurora Yellow Fire Marigold *Tagetes patula* This French beauty lights our fires with bright yellow flowers inset with red flames. Extra early with numerous large flowers, consistently double from the first bloom to the last. The compact neat rounded 8–10" plants bear flat-petaled 2 1/2" blooms. Not day-length sensitive. PVP. Supplier is discontinuing; *this is its last go-round.* ⑤
A=0.25g, $1.60



Grain, Herb & Flower Botanical Index

Achillea millefolium 4699, 4802
A. ptarmica 4804
Agastache foeniculum 4407
Ageratum houstonianum 4811-19
Alcea rosea 5122-27
Alchemilla mollis 4584
Allium schoenoprasum 4512
A. tuberosum 4577
Althaea officinalis 4619
Amaranthus caudatus 4831
A. cruentus 4833-35
A. gangeticus 4837
A. hybridus 4300
Ammi majus 4843
Anaphalis margaritacea 5314
Anethum graveolens 4530-42
Anthriscus cerefolium 3044-45
Antirrhinum majus 5431
Aquilegia caerulea 4995
A. vulgaris 4998
Arnica chamissonis 4409
Artemisia annua 5603
A. ludoviciana 4668
Asclepias tuberosa 4906
Aster nova-belgii 4849
Astragalus membranaceus 4412
Avena nuda 4309
Begonia x tuberhybrida 4889
Borago officinalis 4491
Brassica oleracea 5082-84
Bupleurum griffithii 4903
Calendula officinalis 4911-29
Callistephis chinensis 4851-57
Campanula carpatica 4893
Carum carvi 4507
Celosia argentea 4943-59
Centaurea cyanus 4871-79
Cerinthe major 4962
Chasmanthium latifolium 5423
Cleome hassleriana 4982-88
Cnicus benedictus 4484
Codonopsis pilosa 4520
Coix lacryma-jobi 5147
Consolida ajacis 5160-68
C. regalis 5169
Coreopsis grandiflora 5012
C. tinctoria 5904
Coriandrum sativum 4517
Cosmos bipinnatus 5021-35, 6013
C. sulphureus 5038
Cuminum cyminum 4522
Cymbopogon flexuosus 4587
Cynoglossum amabile 4965
Dahlia x hybrida 5045
Delphinium x cultorum 5052-59
Dianthus barbatus 5061
D. caryophyllus 5063
D. x hybrida 5065
Echinacea angustifolia 4545
E. purpurea 4547
Eragrostis tef 5182
Eschscholzia californica 5381-2
Eupatorium purpureum 5150
Euphorbia marginata 5075
Foeniculum vulgare 4553-67
Gaillardia aristata 5097
G. pulchella 5099
Galium odoratum 4698
Genista tinctoria 5902
Glycyrrhiza glabra 4590
Gomphrena globosa 5102-09
Goniolimon tataricum 5471
Gypsophila paniculata 4861
Helenium autumnale 5434
Helianthus annuus 5500-51, 5906
H. debilis 5555
Helichrysum bracteatum 5483-88
Heliopsis scabra 5113
Heliotropium arborescens 5116
Helipterum roseum 4807
Hunnemannia fumeriifolia 5384
Hypericum perforatum 4686
Hyssopus officinalis 4582
Iberis umbellata 4935
Impatiens balsamina 4883
I. wallerana 5142
Inula helenium 4549
Ipomoea nil 5271-4
I. purpurea 5276-77
I. tricolor 5279
Kniphofia uvaria 5343
Lagurus ovatus 5111
Lathyrus latifolius 5611
L. odoratus 5614-35
Lavandula angustifolia 4585-6
Lavatera trimestris 5171-73
Leonotis leonurus 5041
Leonurus cardiaca 4640
Leucanthemum x superbum 5425-28
Levisticum officinale 4592
Liatris spicata 4899
Limonium sinuatum 5444-66
Linum perenne 5079
Lobelia erinus 5180
Lobularia maritima 4821
Lunaria annua 5132
Lupinus polyphyllus 5195-99
Lychnis chalcedonica 5203
Marrubium vulgare 4580
Matricaria recutita 4511
Matthiola incana 5475
Melissa officinalis 4588
Mentha pulegium 4651
M. spicata 4632
Mirabilis jalapa 5095
Moluccella laevis 4896
Monarda citriodora 4589
M. fistulosa 4481
Myosotis sylvatica 5091
Nepeta cataria 4509-10
N. mussinii 4937
Nicotiana sylvestris 5300
Nigella spp. 5184-87
Ocimum americanum 4453
O. basilicum 4414-70
O. tenuiflorum 4464
Origanum heracleoticum 4648
O. majorana 4616
O. syriacum 4649
Oryza sativa 4312
Papaver orientale 5345
P. spp. 5350-79
Pennisetum glaucum 5259
Perilla frutescens 4680
Petroselinum crispum 3158-70
Petunia x hybrida 5321-28
Phlox drummondii 5335-37
P. paniculata 5339
Physalis alkekengi 4968
Pimpinella anisum 4406
Platycodon grandiflorum 4881
Polemonium caeruleum 5144
Polygonum orientale 5154
P. tinctorium 5911
Ratibida columnifera 5007
Reseda odorata 5255
R. luteola 5928
Rhodiola rosea 4654
Rosmarinus officinalis 4657
Rubia tinctorum 5913
Rudbeckia hirta 5395-99
R. fulgida 5393
Ruta graveolens 4659
Salpiglossis sinuata 5303
Salvia apiana 4666
S. farinacea 5406, 5417
S. officinalis 4664
S. patens 5411
S. viridis 5419
Sanguisorba minor 4669
Saponaria officinalis 4901
Satureja hortensis 4672
S. montana 4674
Scabiosa atropurpurea 5341
Schisandra chinensis 4677
Schizanthus pinnatus 5422
Scuttelaria baicalensis 4681
S. lateriflora 4682
Setaria macrocheata 5257
Silybum marianum 4630
Sinapis alba 4642
Solenostemon scutellarioides 4992
Sorghum nigrum 5435
S. vulgare 5437
Spilanthes oleracea 4683
Stevia rebaudiana 4684
Tagetes erecta 5211-19
T. patula 5224-35, 6017
T. tenuifolia 5243-46
Tanacetum parthenium 4572
Thymus serpyllum 5643
T. vulgaris 4687
Tithonia rotundifolia 5647-49
Trachymene coerulea 5067
Triticum aestivum 4322, 4329
T. durum 4324
T. x triticosecale 4315
Tropaeolum majus 5280-91
T. minus 5293-95
T. peregrinum 4932
Urtica dioica 4644
Valeriana officinalis 4689
Verbascum x hybrida 5657
Verbena bonariensis 5661
V. hastata 4692
V. x hybrida 5664
Viola cornuta 5304-05
V. tricolor 5152
V. x wittrockiana 5307
Withania somnifera 4411
Zinnia elegans 5700-38
Z. haageana 5748



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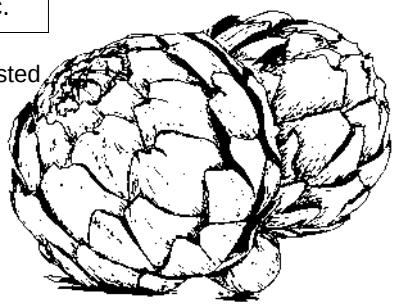

FEDCO·SEEDS

Co-op Seed Packers

Fedco **Tree Sale** April 25–26 for preorders
May 2–3 Public Sale

Ordering Information

	page
Fedco Seeds	3
Moose Tubers	4
Organic Growers Supply	4
Order Forms	
Seeds	75-76
Seed Potatoes	77-78
Tools, Supplies & Books	79-80

Macro Index

Seeds are grouped by general seed type:	pages
Organic vegetables, herbs & flowers	11-13
Vegetable seed & Grains	14-73, 85
Herbs - culinary & medicinal	86-91
Flowers	92-108
Discounted Specials	109
Potatoes	110-117
Cover crops and **supplies**	118-143
Books	144-151
Information Charts	
Vegetables	81
Herbs	84
Flowers	82-83
Botanical Index-grains, herbs, flowers	109

	page
Ageratum	92
Agribon	136
Agri-gel	124
Alfalfa	122
Alfalfa Meal	127
Alyssum	92
Amaranths	85, 92
Arnica	86
Artichoke	63
Arugula	52
Asian Greens	56-57
Asters	92-93
Avena Botanicals	143
Azomite	124
Bachelor's Button	93
Barley	121
Basil	86-87
Baskets, Bags, Boxes	142
Beans	15-19
Bee Balm	87
Beets	40-41
Begonia	93
Bitter Melon	32
Black-Eyed Susan	103
Books	144-151
Broccoli	58-59
Brussels Sprouts	59
Bt	132
Buckwheat	121
Burdock	42
Cabbage	60, 96
Calendula	94
Cantaloupe	25-27
Carrots	39-40
Cauliflower	61
Celery & Celeriac	63
Celosia	94
Chard	53
Chervil	53
Chicory	53
Chinese Cabbage	56
Chives	87
Chrysanthemum	56
Cilantro	87
Claytonia	53
Cleome	95
Clovers	122-123
Cockscomb	94
Collards	61
Compost	128-129
Copper	130
Corn	20-22, 120
Cosmos	95. 109
Cover Crops	119-123
Cress	54
Cucumbers	29-30
Cumin	88
Daikon	42, 122
Deer Stopper	131
Delphinium	96
Dianthus	96
Diatomaceous Earth	133
Dill	88
DiPel	132
Drip Irrigation	140-141
Dry Beans	18-19
Dye Plants	108
Echinacea	88
Edamame	19
Eggplant	64
Endive	54, 109
Entrust	132
Fabrics	135-136
Fava Bean	17, 122
Feed Supplements	133
Felco Tools	138
Fennel	88
Fertilizers	127-128
Flame Weeders	139
Flowers	92-108
Foliar Feeds	128
Foliar Sprays	130-131
Fungicides	130-131
Globe Amaranth	97
Gloves	143
Gourds	38
Grafting Supplies	137
Grains	85, 120-21
Grasses	120-121
Greens	46-57, 61-62
Gypsum	125
Herbs	86-91
Hollyhocks	97
Honeydew	28
Hot Peppers	66-67
Husk Cherry	68
Impatiens	97
Inoculant	23, 123
Insecticides	131-132
Insects, Beneficial	132
Irrigation, Drip	140-141
Kale	61-62, 96
Kohlrabi	62
Labels & Markers	142
Larkspur	98
Lavender	89
Leeks	44
Legume cover crops	122-123
Lemongrass	89
Lettuce	47-52
Loppers	138
Love-in-a-Mist	98
Luffa	38
Lupine	99
Mâche	54
Marigolds	99, 109
Marjoram	89
Melons	25-29
Menefee Humates	126
Mesclun	52
Minutina	54
Mizuna	57
Morning Glory	100
Muskmelon	25-27
Mustards	52, 57, 90, 122
Nasturtiums	100
Neem	128
Oats	85, 121
Okra	64
Onion Seed	44-45
Onion Sets	113
Orach	55
Oregano	90
Pac Choy	57
Pansy	101
Parsley	55
Parsley, Root	42
Parsnip	42
Pasture Grasses	120-121
Peas	23-24, 109, 122
Peppers	65-67
Pest Control	129-132
Petunia	101
Phlox	101
Phosphates	126
Planting Mixes	127
Popcorn	22
Poppies	102-103
Potatoes	110-117
Collections	113
Early	114, 116
Fingerlings	113-114, 116
Late	116, 117
Mid-Season	115, 117
Organic	113-116
Potting Mixes	129
Pruning Tools	137-138
Pumpkins	36-37
Purslane	55
Pyganic	132
Raab	62
Radicchio	55
Radishes	41-42, 109, 122
Refractometer	137
Rice	85
Rock Powders	124-126
RootShield	130
Rosemary	90
Row Covers	135
Rudbeckia	103
Rutabaga	43
Rye	121
Ryegrass	120
Sage	90, 103
Savory	91
Scallion	44
Scorzonera	43
Season Extenders	136
Seaweeds	127-128
Seed Racks	14
Seed Treatment	68, 123-4
Seeder	139
Seed-Starting	134-135
Serenade	130
Shallot Seed	44
Shallot Sets	113
Shiso	91
Sluggo	132
Smart Cart	140
Snapdragon	104
Snow & Snap Peas	24
Soil Amendments	124-128
Soil Blockers	135
Soil Test Kits	137
Sorghum	104, 120
Sorrel	56
Soybeans	19
Soybean Meal	127
Spinach	46
Sprayers	139
Spreader-stickers	131
Squash, Summer	31-32
Squash, Winter	33-36
St Johnswort	91
Statice	104
Stevia	91
Stock	104
Strawflower	104
Substitution Policies	74, 112
Sunchokes	113
Sunflower	105, 108, 122
Surround	131
Sweet Annie	106
Sweet Peas	106
Tatsoi	56
Thermometers	137
Thyme	91, 106
Timothy	120
Tithonia	106
Tomatillo	68
Tomatoes	68-73
Tools	136-140
Tree Planting Mix	127
T-shirt	143
Turnips	43
Valerian	91
Verbena	107
Vetch	122
Watermelon	26-29
Wheat	85, 121
Wheel Hoe	139
Wildflower Mix	108
Zinnia	107
Zucchini	31